

by holding the gouge obliquely upwards an inch or more in the wood. A spout, or spile, as it is termed, about a foot long, to conduct off the sap, is inserted about two inches below this incision with the same gouge. By this mode of tapping, the wound in the tree is so small, that it will be perfectly healed or grown over in two years. A boiler made of thick sheet iron, made to rest on the top of an arch, by which the sides would be free from heat, and only the bottom exposed, is doubtless a secure and rapid process of evaporation. The sides and ends of the boiler may be made of well seasoned boards, which will answer the same purpose as if made solely of sheet iron. When the sap is boiled down into syrup or thin molasses, it should then be taken out of the boiler and strained through a flannel cloth into a tub, where it should settle about 24 hours.—The clear syrup should be separated from the sediment which will be found in the bottom of the tub. The pure syrup should be boiled down into sugar over a slow fire. A short time, however, before the syrup is brought to a boiling heat, to complete the clarifying process, the whites of five eggs well beaten, about one quart of new milk, and a spoonful of saleratus, should be all well mixed with a sufficient amount of syrup, to make 100 lbs. of sugar. The scum which will rise on the top should be skimmed off. Caution should be observed in not allowing the syrup to boil until the skimming process is completed. Drained sugar is more valuable than dry, and to secure a good article, the greatest attention must be bestowed in granulating the syrup. The boxes or tubs for draining, should be large at the top and small at the bottom. The bottom of the tubs should be bored full of small holes, to

let the molasses drain through. After it is nearly done draining the sugar may be dissolved, and the process of clarifying, granulating and draining repeated, which will give as pure a quality of sugar as the best refined West India article.

The greatest objections that are brought up against maple sugar are, that the processes made use of in preparing the sugar for market, are so rude and imperfect that it is too generally acid, and besides being charged with salts of the oxide of iron, insomuch that it ordinarily strikes a black color with tea. These objections may be removed without any comparative difficulty, as it has been proved to a clear demonstration, by the application of one ounce of clear lime-water to a gallon of maple sap, that the acidity will be completely neutralized, and the danger of the syrup adhering to the sides of the boiler totally removed. The acid so peculiar to the maple sugar, when combined with lime in the above proportion, is found to be excessively soluble in alcohol, so much so, that yellow sugar can be rendered white in a few minutes by placing it in an inverted cone, open at the top, with small holes in the bottom, and by pouring on the base of the cone a quantity of alcohol. This should filtrate through until the sugar is white; it should then be dried and redissolved in boiling water, and again evaporated until it becomes dense enough to crystallise. Then pour it into the cones again, and let it harden. By this process a very white sample of sugar may be made, and both the alcohol and acids will be thoroughly dispelled with the vapour.

We shall enter more fully into the merits of this subject in our next.

Owing to the high rate of postage upon "circulars," we have again copied the prospectus of this volume, which may be seen on the last page. It will not, however, be continued in future numbers.