

products of the soil. This, upon a close investigation, will be found to be the most favourable feature of the whole matter; and it would be well, for those whose circumstances would admit of such an arrangement, to engage in the business, upon a respectable scale, for the purpose of ascertaining the exact cost of producing a certain quantity of sugar from the maple. In an average of seasons it will be found, that the profits on making maple sugar will be equal to fifty per cent. on its value. The only correct method of determining the real value and importance of any particular agricultural product, is for the producer to note down carefully every item of cost, which should be based strictly upon the interest of invested capital, and the value of labour and board, and in the vicinity in which the experiment or operation is made. We venture the opinion, that if this excellent rule be acted upon, the manufacture of maple sugar will show, on an average of years, as large a net profit as that of any other branch of farm labour.

The single item of sugar alone, costs this colony many hundred thousand pounds annually, which has to be paid for principally in cash. If only half the quantity required for consumption be produced at home, it would be a saving of a large sum of money, which would be retained in circulation among the producing and commercial classes, and thus benefit every branch, of industry. Without farther attempting to show the advantages of manufacturing sugar from our maple forests, to supply either the whole or a part of the demand for home consumption, we shall, in as brief a manner as possible, give some plain, practical directions, which, for convenience sake, will appear under their different heads or departments:—

**TAPPING THE TREES.**—This operation is performed in a variety of ways, but the one, in every particular the least objectionable, is that of using the augur. The instrument should not be more than three-quarters of an inch bore, and the hole in the tree should not exceed three-fourths of an inch. The spiles ought to be so constructed, that they would fit the hole so completely, on the edge next to the

bark of the tree, that not the slightest particle of sap would be wasted; whilst the inner point of the spile should be beveled so as to allow the sap to freely press between the spile and the edge of the bore in the tree. They should be from 12 to 20 inches in length, having a fourth of an inch hole in the centre of the point that enters the tree, through which the sap will pass to the channel gouged out in the centre of the upper surface of the spile. It will require some pains and labour to make spiles of this kind, but when properly made, they will last many years. In using the augur, the hole should have an inclination upwards, so that the water, after the sugar season is over, will not lodge in it, and thus cause that part of the tree to decay. On most trees a three-fourths of an inch augur hole will grow up in four years, and as soon as this is the case the tree may be retapped in the same place. On large trees from two to three taps may be made leading to the same vessel, and the spiles should be made of various lengths, to be adapted for that purpose. By employing the augur and the hollow spile, the air will be completely excluded from the incision in the tree, and, besides, no sap will be lost.

**APPARATUS FOR BOILING.**—When the business of sugar making is carried on upon a pretty large scale, the best apparatus for boiling down the sap that can be employed is one or more large sized potash kettles, set in an arch of stones. More sap can be evaporated in vessels of this kind than any other, unless perfectly flat-bottomed boilers be used, such as are employed in many salt works. Boilers may be made of sheets of iron, about seven feet long, two feet wide, and two feet deep, which, if set in an arch, will be found very efficient in boiling down or evaporating sap. The ends and sides may be made of well-seasoned boards, and, by a little care in the construction of the arch, the wood may be completely protected from the action of fire. A house for boiling sap is very desirable, as it will enable the business to be prosecuted both night and day, if it should be required. The most convenient method of supplying the boilers with a regular supply of sap is to place a long trough or vessel directly alongside or over them, from which a small tap,