evaporator will. It is also important to get sap through the evaporator as quickly as possible. To do so, keep sap in evaporator very shallow, say about one-half or three-quarters inch deep. By so doing, the operator will be able to draw off a few quarts of syrup every twenty minutes, which should then be strained through a piece of flannel and allowed to cool. The operator should always keep the skim off as clean as possible, and should empty the syrup end of evaporator every morning before starting fire, and scrape or scour off all of the nitre that forms on the bottom.

CLEANSING.

After syrup cools, it should be heated in sugaring-off pan. When it reaches blood heat, put in about two cups of milk to five gallons of syrup, then bring to the boiling point, and then again strain through a flannel. The milk, being heated in the syrup, curdles, and all impurities in the syrup attach themselves to the curdled milk, which rises to the surface just before the boiling point is reached.

If making syrup into sugar, do not try to make much at a time. Better make small batches often, rather than large ones, as the latter will surely discolor the product.

Now, about disposing of the product. I prefer making into sugar, as there is a much better market for small packages than large ones, and if you put syrup into quarter-gallon tins, the cost of tins soon counts up, and it is hard to advance the price to pay the cost of cans; but it does not add much to the cost if made into one-half-pound or one-pound blocks. A mould $1\frac{1}{2} \times 3 \times 4\frac{1}{2}$ inches, or $20\frac{1}{4}$ cubic inches, makes one pound of sugar. Blocks or cakes of sugar should be wrapped in parchment paper, with the maker's name and address, and a guarantee of purity, printed on wrapper. Sugar put up in that way is in the best possible shape for selling, either through commission merchant, to grocer, or for selling direct to consumer.

Now, about profits. Some farmers say that there is no profit in making maple syrup and sugar, and cut down their woods. I am of the opinion that they are in need of a little ready money, and do not look to the future. Now, the way I look at it is that nine-tenths of the maple groves are located on land that is either hilly or stony, or both, and, therefore, not of much value. The growth of the trees will more than pay for the interest on the value of the wood and land, and you are also preserving an article that is becoming more valuable every year. As to the help required, well, as the sugar season comes during the slack time on a farm, the help usually found on a 100 or 150 acre farm will attend to 1,000 trees, with the help of an extra man for eight or ten days during the rush, besides attending to the regular farm work. The full equipment (not counting value of woods) costs about $500 for a 1,000-tree woods, and should produce from 2,000 to 2,500 pounds of sugar, which should sell for $180 to $250, according to the season. Another item of expense is about 15 cords of soft wood. And then, think of the fascination of making sugar, coming, as it does, the first of the new season's product. Ask any small boy whether to make sugar or not, and he will tell you right. But do not forget, Mr. Sugarmaker, if you wish to make a fine-quality article, to use cleanliness and speed in gathering sap, making sap into syrup, and syrup into sugar.

W. J. PENDELBURY.

Missisquoi Co., Que.

## Nova Scotia Syrup-making.

Editor "The Farmer's Advocate":

As another sugar season is approaching, it might be advisable for those who have spent much time in the sugar bush to exchange experiences one with the other, and also for the benefit of those who are just beginning.

The first thing to do is to select your location. If possible, choose it facing the south or east, in order to get the benefit of the early morning sun. In locating your camp-ground, an elevation is required, so as not to lift the sap, but let gravitation carry it from the gathering tub to the storage tank, and from that to the evaporator. Another fundamental consideration is to build near a stream of water, not for the proverbial reason that a milkman requires so much water, but for sanitary purposes, for which there is a continual call in a sugar camp. In order to have hot water all the time ready for use, I set a ten-gallon keg on an elevation behind my evaporator, and run a pipe from it through the arch under the grates, with a faucet on the other end; open the faucet, and gravitation will empty the keg. After tapping the trees, gather the sap every day while it is running, so as not to allow it to stand, and boil it as soon as possible after it leaves the tree, as rapidly as possible, in a corrugated pan, or an arch—a sectional pan, connected by siphon preferable, as the section confines the principal skimming to the next pan. You can remove the sediment from the syrup much more effectually with a felt strainer than with flannel, as with the latter you will require a settling tank. I use cheese cloth for straining the sap, and a felt strainer for the syrup, which I test with a saccharometer to make it of uniform consistency. It is very important to have covers on the sap buckets to keep out the storm, as a very little water dropping from the moss and bark of the tree forms a decoction that colors and spoils the flavor of syrup or sugar.

D. W. DINNOCK.

Cumberland Co., N. S.

## Farm Values and Wages in Canada.

The Census Monthly for January says that values and wages in Canada make a good record for 1910. The total value of live stock on the farms is $593,768,000, which is $34,979,000 more than in 1909. The price per head of horses is $132.50, as against $130.72 in 1909; of milch cows, $42.60, against $36.36; of other cattle, $30.90, against $28.81; and of sheep, $6, against $5.89. Swine alone show a drop in average price, being $11.30 per head, against $11.80. The total value of horses is $293,398,000 for last year, against $278,789,000 for 1909; of milch cows, $121,613,000, against $103,601,000; of other cattle, $131,781,000, against $126,326,000, and of sheep, $15,819,000, against $15,735,000. The value of swine, however, fell from $34,368,000 in 1909, to $31,157,000 in 1910.

The highest average price of horses was in Saskatchewan; of milch cows, other horned cattle and sheep, in Ontario; and of swine, in Quebec. Horses three years old and over reached the highest price in British Columbia, where the average was $225. Swine, per 100 pounds live weight, ranged from $6.50 in Manitoba, to $9.62 in Quebec. The price of unwashed wool was 18 cents in 1910, and 17 cents in 1909, and of washed wool, 24 cents for each year.

The average value of occupied farm land in the Dominion was $38.45 per acre, or 15 cents less than for the previous year. It was highest in British Columbia, where the cost of clearing is heavy, and the land is largely occupied for fruit-growing, the average being $74 per acre, or 56 cents per acre more than in the previous year. Ontario comes next, with $48 per acre, which is $2.22 less than in 1909.

Farm help for the summer season shows an average of $35.15 per month for males, and $20.70 for females, counting board, as compared with $33.69 and $19.08, respectively, in the previous year. Males have an average of $347.10 and females $209.69 per year, counting board, as against $336.29 and $206.08, respectively, for 1909. The highest prices per month in summer are paid in Saskatchewan, Alberta and British Columbia, where they are $40 and over for males, and $25 and over for females, counting board. The average rate of board per month ranges from $8 for males and $6 for females, in Prince Edward Island, to $20 and $17, respectively, per month in British Columbia.

The rates of wages and board are quoted for the farm, where males are employed on the land and females in the house. They are averages computed from a large number of returns by farmers to the Census Office.

ARCHIBALD BLUE, Chief Officer.

"Tapping."

# THE DAIRY.

## A Cent per Pound.

Editor "The Farmer's Advocate":

I have been weighing each cow's milk since 1905, and do not see how I could get along otherwise. With the present low price for milk and high price of labor and feed, to be able to make dairying pay, a farmer must apply business methods to his work, and one cannot make it pay at all unless the cows he milks are yielding a profit over feed.

How are you going to find out what cows are boarders, and what ones are giving a profit, unless you weigh the milk? Taking the daily average will not do at all; we cannot afford to dairy in any such slipshod manner. We must know which are our best cows, and from which ones we would raise our future herd, as we certainly want to improve, and we must raise our good heifer calves if we are going to improve. We cannot buy at present prices, and run the risk of getting cows which are no good.

When I started to weigh, I had a fairly good herd of grade Ayrshires, but felt that some of them were not as good as I should have. One cow, especially, I thought I should dispose of, but she was too thin to sell for beef, and did not come in at the right time to sell for the Ottawa or Montreal markets, so I kept her on. She never gave more than half or two-thirds of a pail summer or winter, no matter what feed, and I felt that she was not giving enough milk. I started weighing, and I found that that very cow gave me over 9,000 pounds milk in ten months, over two thousand more than what I considered a first-class cow. Next year, when she came in, I raised her calf; and now, out of a cow which, had I not started weighing, would have gone to the butcher, I have four good heifers.

The first year my herd averaged 6,750 pounds for the year; the next year they averaged 7,100 pounds. I had the same cows and the same feed, but the weighing had started me to watch the cows. I milked more regularly, and I consider I was well paid by the increase—over $3 per cow alone for the bother of weighing. I have a spring scale, and I do not believe it takes me ½ minute per cow to attend to the weights. A dairyman can watch his cows more closely when weighing than otherwise.

I have a cow which freshened at Christmas, milked well for a while, then started to go down about 1 pound per day, until she had gone down four pounds at a milking. Had I not been weighing, I would not have noticed this. I tried to keep the flow up by feeding a little heavier,