

Making Maple Syrup.

BY T. D. J.

The Fuel.—Preparation for this work should be made in the fall, when all the rough wood lying around can be picked up, put under cover or else into neat piles, so as to have it good and dry for the fire. Without dry wood the work goes on slowly, one is always behind, and a strictly first-class article cannot be so easily produced; much valuable time is lost, and to make it up one has to boil much at night, greatly increasing the labor—slavish at the best.

Always use grates in your arch, and a good, tight door, so that you can control the draught, and by keeping all the heat in a great saving of wood is effected.

The Tapping.—Be ready for the first run. The syrup-maker who misses that, say in a bush of 500 trees, loses \$30 at least and the most delicate and palatable of the saccharine products. A small bit (less than half-inch) is used either for the metal or short tin spiles; they are handy and clean, and the small hole does not scar the trees to any extent. Bore about an inch deep with a little slant, and drive the spile well up to the shoulder in the bark, so as to prevent any leakage. With a good brace, bit and hatchet, two men can tap 500 trees in a day.

Tin buckets are by far the best to use, as they are easily stored and quickly handled; the deep, narrow ones are the best, as very little rain can get into them, and their length (about 16 inches) keeps them perpendicular, so that they hold about ten quarts, and very little sap is lost during a heavy run.

Gathering.—This should be done as quickly as possible, as the sap should not stand in the buckets very long. Barrels with one end taken out and a float in them are the quickest for this work. For storing the sap use a big tank that will hold from 400 to 500 pails, then you are always prepared for a heavy run and will sometimes save the cost of a tank. Always strain the sap thoroughly when running it into the store tank. This should not be too near the arch, neither should the sun shine on it, as when the season advances and the days get warm, it is apt, as some old sugar-makers say, to "sun-burn" the sap, causing the product to have a very dark color, also spoiling the flavor to quite an extent; and will not bring the top price of the market.

The Boiling.—The sap from the store tank to the evaporator can be run automatically, or by a siphon, and should again be strained. By using a wormer before the sap enters the evaporator greatly hastens the boiling process. The best evaporators are made of the heaviest gauge of tin, enabling the syrup-maker to produce the lightest-colored article. For the ordinary syrup-maker, an evaporator such as was described in the February number of the FARMER'S ADVOCATE for 1892 answers excellently. The present writer has used such a one for three years, and it has given good satisfaction. It is 14 feet long, 2½ feet wide, and four inches deep, and divided into 13 sections. The sap runs out of feed tank into a wormer in the chimney, is then carried to the front end of pan through a small tin pipe and runs in where the fire is hot, and for quick work the sap should be run not more than two inches deep, zig-zag over the bottom of the pan. In this way one can have syrup in half an hour after commencing to boil. When it reaches the back section it can be drawn off and strained through flannel. It should then be allowed to stand and settle for at least 12 hours and then finished. During the boiling process the sap sometimes has a tendency to boil over, and right here let me say, don't throw in a few pounds of fat, salty pork, but use instead a little sweet cream, a few drops in the front section of evaporator will answer quite as well, and not give the offensive flavor of the former.

The Finish.—For finishing, use a tin pan one foot deep by two and one-half square, set on a small brick arch; pour the syrup out of the can you strained it into, being careful to keep out all sediment, then very little cleansing is necessary. For that purpose use the white of two or three eggs, well beaten and thoroughly stirred in the syrup. Just when it comes to a boil skim off the top, and in a short time test, not by "fooling" away time flaking it on a dipper and guessing at it (for in that way on a cold day your syrup will be too thin, and on a warm day too thick), but test it with a saccharometer, that can be bought at any drug store for 50 or 75 cents. For heavy syrup boil to 32° density.

Marketing.—By all means have customers for as much of your syrup as possible, and save middlemen's profits, and it's better for both seller and buyer. Deliver in neat tin cans. For years the writer of this article has had a custom trade and never found any difficulty in getting \$1.25 per gallon for a first-class product. In order to make a high grade of syrup perfect cleanliness from "start to finish" is absolutely necessary. After the season is over scald and clean everything thoroughly, and then you are ready for that "first run."

It is estimated that the South Australian wheat crop will not yield over five bushels per acre over the colony. In some sections much of the crop has been cut for hay, and in others the harvested crop will be about 2½ bushels per acre, and that poor, shrivelled, miserable stuff, which means that very little, if any, new wheat will be exported from that country this year.

FARMERS' INSTITUTES.

Practical Gleanings from Division No. II.

Feeding and Care of Dairy Cows.

Mr. D. M. Ferguson, Odel, who has made a success of supplying milk to the city trade, London, Ont., considers that stables should be frost-proof even in the coldest weather, but should be well ventilated. Feed and water regularly, and keep the stable clean. Use the brush and comb every day. Never expose cows to uncomfortable conditions at any time. The food should be bulky. Corn-fodder and straw have been found to give as good results as hay and straw. Mr. Ferguson has tried several grain rations, and finds bran and shorts, with a little oil-cake, to give good results. The feeding of oat-dust with shorts, in the form of slop, mixed 3 to 1 by bulk, gave best returns in quantity and quality of milk. Hay that had heated in the stack, or mow, materially lessened the milk flow. As a summer food, soiling with Lucerne was commenced May 18, and kept up till red clover, peas and oats came in, after which fodder-corn supplied the ration. Pumpkins were highly recommended for milch cows. Mr. Wm. Rennie's experience goes to show that chopped hay and straw mixed with pulped mangles makes grand cow feed.

Dehorning.

James G. Munro, Embro, has had a lot of experience in dehorning, and considers it a profitable and merciful operation. To prove that it does not cause suffering, the speaker stated that if a cow has a horn shelled off by accident, she will fall off in her quantity of milk; if a dog bites a piece off her tail, the effect will be noticed in the next milking; but when cows are properly dehorned, no falling off in milk supply will be noticed. The advantages are in the greater docility of the animals, at all times. This is especially noticeable if a cow gets loose in the stable. A herd of dehorned cows will drink at the same trough, at the same time, like sheep. There is no such thing as bossing around the salt-box, or anywhere else. Mr. Munro's plan is to put the animal's head into a stanchion, with a box or stool beneath the head, upon which it rests, and a bar across above the neck to hold it firmly down. Then she is tied forward by means of a rope drawn through a pulley 15 or 20 feet ahead of her, and held by two strong men. She is then ready for operation, which is done by a fine-toothed saw, taking the horn off as close to the head as possible, as it is softer and less liable to bleed at that point. It is better done in the fall, after the flies are all gone, or in spring, before the first of April. Mr. Richard Gibson, one of the Dehorning Commission, stated that cattle should not be dehorned till after two years old, as after that age they never become bunters. He also recommended that horns should not be taken off in cold weather, or they would heal very slowly. Mr. Chas. M. Simmons, speaking from a shipper's standpoint, was strongly in favor of dehorning, as he had lost large numbers of valuable cattle by having a few vicious steers in carloads of shipping stock at different times.

Rotation of Crops.

Mr. Wm. Rennie, superintendent of the "Model Farm," Guelph, said that in going through the country he found greater prosperity and better feeling when dairying was being carried on. Rotation of crops is the only method of getting the best out of the land for the least outlay. A four-years' rotation was recommended in sections where clover would produce a crop the second season. The plan is to seed down with clover among wheat, oats, or barley. Always have the clover seed fall before the drill or much will be thrown in the rows of grain and be largely smothered. When oats are used they should not be sown thicker than five pecks per acre, or the clover will be weak. The second crop of the second year's clover should be ploughed under for a hoed crop, or for peas. The hoed crop should be the cleaning one. When peas are sown, the land should be thoroughly cultivated after the harvest is taken off. Mr. Rennie's experience agrees with T. B. Terry's, in clover and potato culture, as given in our "Union" report, Jan. 15th issue. Following the hoed crop comes the cereal crop, with which the ground is again seeded down to clover. Mr. Rennie recommended that the seeding consist of eight pounds of red clover, three of alsike, and three of timothy. By this rotation, he built up a poor, impoverished farm to a sufficient state of fertility to have awarded him the silver medal for the second best farmed farm in Ontario.

Fruit Growing.

Mr. McNeil, Chatham, talked on the importance of farmers paying more attention to fruit growing. Many apple orchards have paid their owners very little profit for the last few years, largely because of codling-moth and fungous diseases. The treatment for these pests was gone into at considerable length, giving the same in substance as is contained in our Fruit Growers' Report, in our Dec. 15th issue.

Bees.

R. F. Holtermann, Brantford, considers bee-keeping worthy the attention of the farmer, as it takes the least fertility from the soil of all the agricultural industries. It should always go in conjunction with fruit growing, because cross-fertilization is essential to successful fruit setting with many varieties of apples, pears, strawberries, grapes, etc., and this is largely done by the little bee passing from one flower to another, in quest of nectar. It also furnishes profitable, and interesting employ-

ment for boys and girls, men and women, who would otherwise leave the farm to try something in the town or city, which will end in failure and disappointment.

Farmer's Library.

Mr. McNeil finds in passing through the country that too many farmers have little or no library. Education preceeds the felt need of literature. The speaker does not consider our Public school system conducive to the best ends in educating farmers. He, as an old school-teacher, never heard a visitor on examination day encourage a bright boy by telling him he would be fitted for a first-class farmer, but always that he would do for a lawyer or doctor if he kept on improving. We have a school for the education of farmers at Guelph, which Mr. McNeil thinks should be more highly appreciated and used by our farmers.

Beautifying the Farm.

Mr. Rennie, by two charts,—one showing the bare house and barn without trees, the other with the same house and barn, having hedges, winding roads clumps of trees, and a nice lawn interspersed with flower beds, rockeries, etc.,—illustrated his subject. Most farmers who have growing sons and daughters, understand quite well the importance of keeping them from running off to a town or village in the evenings. Now, by making the home attractive, both inside and out, much anxiety will be saved, and the family will grow up better men and women than they otherwise would. The winter season is a good time to lay plans for spring. At that time many old fences can be removed, ready to be replaced by neat wire structures, inside of which evergreens may be planted, two and one-half feet apart, to be trimmed into hedges the height of the fences. The trimming should be done in September. Mr. Rennie is in favor of a good-sized lawn, part of which can be kept mown with a lawn-mower for tennis or croquet. The rest may be mown with a scythe. A good lawn mixture consists of equal parts of white clover, blue-grass and red-top, sown thickly. A great improvement can be made in the appearance of a farm by giving the barns a coat of cheap paint. Mr. Rennie has increased the value of two farms two-fold by a little inexpensive decoration, such as is seen in a few country homes.

Practical Gleanings from Ontario, Division No. VII.

The Round Silo.

Mr. D. E. Smith:—I had the pleasure of visiting the Messrs. Gould's round silos at Uxbridge, and they claim that they are not only the cheapest form, but far the most satisfactory in every respect. It may be made somewhat as follows: Get your lumber 2x6 or 2x8, and make the edges join and fit closely together, so that when stood upright there will be no cracks. It is made the same as a large tank. It should have the same width at the top, middle and bottom. The diameter should be about 16 or 18 feet, and the deeper the better. Dig out a good foundation, of a foot or more in depth, so that the bottom may be firm, and have it well underdrained. Then place these 2x6 pieces upright, and bend around them from 5 to 7 ½-inch, round, iron bands or bars. Two of these should reach around the silo, and have fixtures at opposite sides, at the ends, for tightening or loosening them by means of nuts. These nuts may be tightened in summer and relaxed again as soon as the ensilage is put in. Coal tar will preserve the bottom that touches the ground; it is best to be smeared on the whole inside. A roof can then easily be put over this, and your silo is ready for the corn. Four feet from the bottom, and at intervals of six feet up, holes are made for taking out the ensilage. These are made large enough to get the ensilage out easily, and are bevelled, with the wider side inside, so they cannot be pushed out, and then, when replaced, tar-paper is put over the whole hole; these are reached by means of ladders. The frost has never yet injured the ensilage, and this kind is very popular around Uxbridge, due largely to Mr. Gould, who was the pioneer builder.

Round silos are becoming very popular around Uxbridge, and, in fact, many intend building them in the counties of Northumberland, Victoria and Peterboro, because they are simple, safe, cheap and easily constructed.

Dehorning.

Many considered dehorning cruel when it was first mentioned, but when Mr. J. F. Bean explained the advantages derived, and that the "cruelty" was mostly imaginary, then the people looked at it with a greater degree of favor. Wherever it has been tried, it has been found to give the best of satisfaction. The dairy cows become quiet, and the hides of beef animals are much better, because they are not injured by the horns of other animals. Some use clippers, others a saw, but in either case it is done quickly, and all goring is at an end. Some remove the embryo horns when the calves are a few days old, others apply caustic, and so kill the horn of the young calf. Sometimes horns grow if dehorned under a year and a-half old, but after that age they do not. The horn should be taken off as near the head as possible to obtain best results.

Hired Help on the Farm.

One thoughtful farmer advocated hiring men by the year, and having a house for them. There would be an advantage to the employer, as it would save work in the house, and be better for the children, and the man would be more likely to remain for a number of years.