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Garden and Orchard.

Drying or Evaporating Fruit and Vegetables

Is fast becoming an important business in America, and Canadian farmers should look closely into this business and see whether it may not be added to their home industries. Every enterprise which will add to the profits of the farm should receive its share of attention. Throughout the Dominion large quantities of fruit, especially apples, go to waste nearly every year, or are sold at prices that do not pay the growers. But we believe a change is about to take place, and that it will be an advantageous one to the farmer. Canning establishments are being founded in various sections, and fruit dryers or evaporators are doing a good work where used.

Dr. Rider, in his pamphlet on fruit-drying, says:

The prices realized during the past two years and up to this time for domestic evaporated fruits, should invite the careful investigation of every farmer and orchardist.

In 1874 the total amount of American dried fruit exported was less than one and a half million pounds. In 1880 the exportations increased to two million pounds per month, notwithstanding the greatly increased consumption at home, owing to the superior quality of the product.

The old custom of exchanging two pounds of domestic dried fruit for one of imported has been more than reversed. Even our wild raspberries and whortleberries, properly evaporated, stand at par with many of the far-fetched luxuries of Smyrna and Italy. One pound of evaporated peaches commands in our markets a value equivalent to three pounds of raisins, four of Zante currants, and five to eight of figs, prunes or dates. Current prices of all kinds of domestic evaporated fruits, rated on a specie basis, are higher than ever before, with perhaps the exception of apples, which is due to the large stock of perishable fresh fruit—green apples—crowding our markets. This, however, will only tend to open up new markets—where they will be indefinitely retained—and increase the demand for evaporated apples in the future.

It would be difficult to estimate the importance of this industry, which is essentially American in conception and development, without making reference to the increased interest in fruit growing in this country within the last few years.

In 1876, when at the American Centennial, we met E. McFarland, who is well posted in all matters concerning the evaporating of fruit, and since then we have corresponded with him. On the 27th of last month he wrote us the following private letter, which we take the liberty of using:

It will be to the interest of all farmers to have one evaporator at least, if only the family size. It is only a question of time when the farmers themselves will do the evaporating of the crops of fruit and vegetables, in place of the factories. The farmers can produce and manufacture cheaper.

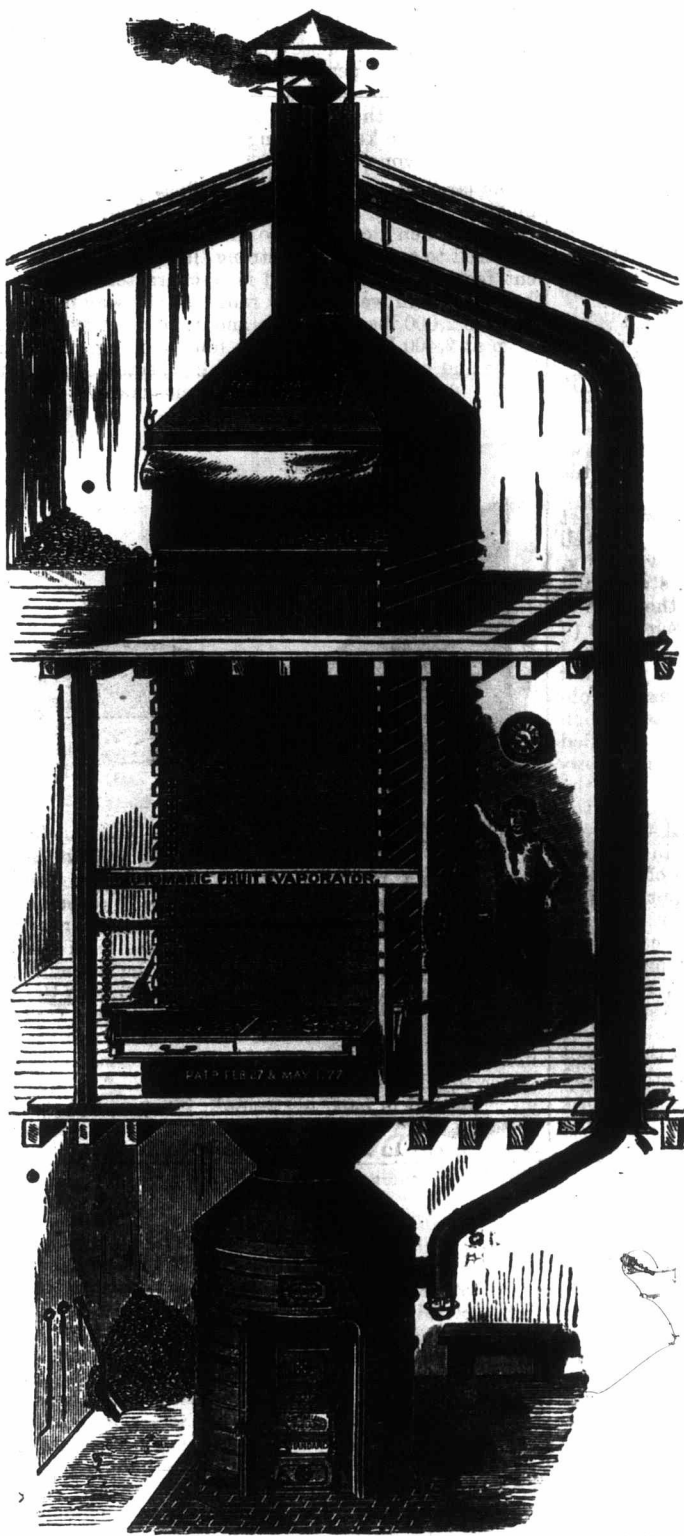
I have been corresponding with parties in Brantford, Ont., who wish to cure corn. Some using the dryers last year made more by drying corn than with apples, and as sugar corn is a sure crop nearly every year, there is not much risk in purchasing a machine to follow the business. The corn should be planted at succeeding periods of about one week apart, so that it would come along and get at the proper stage as they wish to cure.

Stowell's evergreen sweet corn is the best variety, and a No. 1 article of that grade com-

mands from 18 to 25c. per lb. The loss by evaporation of apples and peaches is 88 per cent.; they each weigh 50 lbs. to the bushel. Water and waste of corn 90 per cent. Black-cap raspberries pay well; they weigh 50 lbs. to the bushel green; 1 lb. evaporated is equal to 4 qts. green.

By actual trials it has been shown that the cost of drying peaches in a first class evaporator is 65c. per bushel, allowing 40c. per bushel for the fruit. One bushel of green fruit will weigh when dry 5½ lbs., and if sold at 25c. per lb., will bring \$1 34½.

The cost of evaporating apples, allowing 20c. per



Automatic Fruit Evaporator, made by McFarland & Wilt, 112 North 5th Street, Philadelphia, U. S. A.

bushel for them, is estimated at 36c. per bushel. One bushel of apples will equal 6 lbs. dried product, which if sold at 15c. per pound, will bring 90c. From the above figures it is easy to calculate what the profit would be, viz., on peaches there would be a clear profit of 60c. per bush., on apples a profit of 54c. per bush.

From the Report of the Commissioner of Agriculture and Arts for the year 1880, we take the following account of the work done in one season by an evaporator:

No. bushels apples bought.....	6,755
" " shrinkage.....	337
" " evaporated.....	6,418
Average cost of apples per bushel, 17 cts.	
No. pounds made from above, 382.79.	
Total received for sale of fruit.....	\$4,598 00
Total expense for fruit, storage, handling and manufacturing.....	1,989 00
Leaving net profit.....	\$2,609 00
Average number lbs. per bushel, five ninety-six one-hundredths; average cost of drying and preparing per bushel, 11c.	

The skins and cores were utilized for vinegar to December 1st, after which time we dried them, and sold them for 3½c. and 4c. per lb. delivered on cars. During the time we dried them the cores and skins paid all running expenses. Have sold vinegar to the amount of \$138, and have enough on hand to make the amount reach \$200, which added to the profit on apples with the cores and skins will make a total net profit for 1879 of over \$2,800.

The evaporator shown in our illustration is very highly recommended. All interested would do well to write to the proprietors for full particulars.

Orchard Planting.

The superintendent of the grounds of the U. S. Department of Agriculture at Washington advises the following plan of setting fruit trees. He says:

"It is a common observation that the outer rows of trees in established orchards are finer and more productive than the trees in the interior of the plantation. This superiority is all the more conspicuous if the orchard is bordered by cultivated fields, and it is fair to presume that the extra luxuriance is owing to the trees having a greater extent of unoccupied soil for the ramification of their roots. Something is also undoubtedly due to the greater space available for the expansion and spread of the branches; but it is in accordance with all experience in the cultivation of plants that a rotation of crops is absolutely essential toward securing the best results of the fertility of the soil. Keeping these facts in view, it is suggested that an improvement upon the present method of planting orchards would be gained by planting two rows of trees from 18 to 25 or more feet apart depending upon the nature of the trees, and alternating the plants in the rows. Then allow a space varying in extent from 300 feet to any greater distance, before planting another series of rows, and so increase the plantation as far as may be desired. The intervening spaces between these double rows of trees would be available for the cultivation of the ordinary crops of the farm. The roots of the trees would not only participate in the benefits of cultivation, but would also have, practically, unlimited room for extension before meeting with other roots of their kind. Immediately under the trees, and for a distance on each side of the rows, as the branches spread, the surface could be kept in grass. If not sown down immediately after planting, which might not be desirable in all cases, it should be done after the trees attain a fruit bearing size, or from five to seven years after setting out. The shelter which will be afforded to other crops by these orchard belts will be found valuable as protection from winds as well as in forwarding early crops. This method is particularly applicable to apple and pear trees.

The bulb of the tuberose never blooms but once. They require a sandy soil.

Thyme will grow anywhere, but it prefers a dry, poor soil. If the ground is rich, the plant will grow too luxuriant, and lose its aromatic qualities.