

phoric acid, and 7 pounds of sulphuric acid (W. O. A.). Can it be that the farms of Canada are so excessively fertile that we can afford to send one of the best and most readily-available fertilizers across our borders to enrich the fields of others?

On Farm Gardens.

PAPER NO. 2.—BY P. E. B., OTTAWA.

Presuming your readers have, some of them, followed the recommendations laid down in paper No. 1, regarding planting strawberries, they will by this time see them in good leaf. For my own part, I put out a large bed on the 20th July, on ground that had yielded an excellent crop of early potatoes; the plants were well watered for a week, every evening, when the weather was dry, and I did not lose a single plant out of several hundred, though a good many of them were not even shaded. The plants were grown on my own ground—Arnolds 27, and New Dominion—and, of course, the roots were never allowed to get dry; some of them are now throwing out runners, which are cut off with a knife so soon as they appear; some growers pull them off, but I prefer the knife, as it does not unsettle the roots of the plants. Why people who have runners of their own, or can obtain them from a neighbor close at hand, persist in planting in spring and autumn is a mystery which I have never yet been able to solve. An early crop of snap beans, peas, potatoes, early horn carrots, spinach, lettuce, or in fact any early vegetable, may be taken off the ground before the strawberries are ready to put out, and in this way the land is made profitable, and the next year a fair lot of berries may be gathered, whereas, if they are planted late in the fall or early next season a whole year is lost, as they should not be allowed to bear the first summer, and if they are the fruit will be small and the crop a very unimportant one. It has been suggested that strawberries may be planted between corn in the spring, the rows of corn being four feet apart, but if the ground is in good heart and this heavy foliage plant grows rank, the strawberries will be drawn up to the light and come out in the fall spindly, weak-looking things, so that this mode of cultivation cannot be at all recommended. Before leaving this subject it may be as well to say a few words regarding the preparation of the plants. When taken up they should have the runners trimmed off and laid leaves one way and roots the other, then with a sharp knife cut off the longest of the leaves and the most projecting of the roots, so that the plants are pretty much all the same length, stretch a line and set them with a garden trowel so deeply as to leave a slight cup in the soil round the plant to receive the water, which should be liberally given after the job is finished. The operation of planting should be performed on a cloudy day, or towards evening if the weather is very bright. The young plants are very tenacious of life, and are bound to grow if they get any encouragement to do so.

The first fruit bushes to ripen their wood and drop their leaves are the red and white currants; frequently at the end of August, and, at any rate, during September, these may be transplanted, and it is useless to say, no man with a soul above pork and beans should be without a liberal supply of these exquisite fruits. A good deal has been said about the long-suffering, much-abused currant, and it certainly is a plant that will stand neglect probably better than any other, but if it gets even moderate attention behold how good and pleasant a friend it is, and with extra cultivation the ordinary red Dutch variety may be made to bear berries rivaling in size those of the real cherry, and the red cherry will swell up as to compare favorably with the Delaware grape. One might as well

try to choke a dog with melted butter as to attempt to kill the currant with the most highly concentrated manures; all the Ribes tribe thrive most successfully under extra care and cultivation. If the husbandman proposes to give them a good square chance, the bushes should be set five feet apart in the rows, and these should be six feet wide from plant to plant; four feet apart is generally recommended, but I have found the above distances preferable, giving more room for picking and manuring, and a better opportunity to see that no weeds or grass are allowed to grow underneath them. The whole surface of the soil should be kept thoroughly pulverized on the surface with a steel rake, which should be passed over the ground at intervals of every few weeks, no very laborious job if the soil is light, and adds much to the general appearance and health of the bushes. The above distances will look rather extensive when the plants are first put in, but in two or three years the surface of the ground will be pretty well covered with foliage, if the soil is liberally treated with manure. After three rows are planted a space of eight feet should be left for the purpose of running a wheelbarrow through for the purpose of applying nourishment to the land; the best application to make is night-soil deodorized under cover with dry peat soil, road-dust or hard coal ashes, the cinders of which have been sifted out, I find this latter to be almost an entire specific for saw-fly currant worms and the measuring worm, the amount to give being one wheelbarrow load to every four bushes, every second year; this compost should be put on late in the autumn, some time during November, having been mixed up some six or eight months beforehand. One row of white currants, two of red and one of black two hundred feet long will be quite sufficient; the first should be three feet from the strawberries, the second and third three feet each apart, then a space of eight feet, then a row of black currants, and two rows of Houghton seedling gooseberries with six feet between them, with two feet space, will complete a strip of fifty feet by two hundred feet long. As the currant is subject to various enemies, of which the borer is the worst, it is requisite to have a small nursery of plants in reserve to supply any blanks that may occur, or to sell or give away to the neighbors. The usual way of starting these cuttings is to have them all sorts of lengths, make up a small, square bed, and run the butt end into the ground, either in the fall or spring, and then pray for rain; a few sickly plants are thus procured after several years' waiting. But I humbly submit this is not the correct way of raising plants either for use or profit. Cuttings may be made any time during September or October; those should be of a uniform length of one foot, tied in bundles and deposited in sand in a box in the root-house or cellar, where it does not freeze; when spring opens these may be parated, and on examination it will be found the callus has been formed at the base of the cutting round the bark. A place where the earth is in good heart having been selected, a line is stretched after the ground has been thoroughly loosened with the spade and levelled with the rake, the spade is then thrust in along the line at a slight angle and the earth thrown out from the operator, leaving a V cut with a straight side next the cord. The cuttings are then set in this grip six inches apart, leaving two or three eyes at the top of the cutting above the soil, the earth is then filled in half way up, and is rammed in tight with a piece of two-inch board five feet long and six inches wide, having a square end cut on it with a saw, the other end being rounded off to form a handle; the firmness of the soil at the base of the cutting is the great desideratum, the rest of the soil is then filled in and the ground smoothed off neatly with the rake. If this plan is followed not three per cent. of the cuttings will be lost, and vigorous young plants will be the result of the operation.

Canadian Butter.

BY L. B. ARNOLD, SEC. OF THE AMERICAN DAIRY-MEN'S ASSOCIATION.

The peacock is not all covered with gaudy plumage. He has some very ugly feet which are not only naked, but, anon, obtrude themselves in a way very mortifying to his pride. Few things indeed are without some blemish. They have their shady as well as their sunny sides.

In the race for awards at the great International Exposition at Philadelphia, Canada outstripped all competitors in the display of cheese through the entire season. She made a grand record for herself, and one of which she may well feel proud and rightfully boast of for many a long year in the future. But while her cheese was covered with a glory, her butter fell as far behind as her cheese ran ahead. It was certainly nothing to boast of, though it was not destitute of merit. But it was rather an ugly foot when compared with the brilliant plumage which adorned the other branch of her dairy display at the Centennial, nor was it in keeping with the show of other agricultural products from Canada. A locality devoted mainly to cheese generally fails in butter, for the reason that the latter is apt to receive less attention than the cheese. The butter shown at the Centennial, as I understand, was taken from the great cheese district about Ingersoll, and hence may not have been a fair sample of the butter of other localities. But Canadian butter as a whole does not rank with Canadian cheese, nor with the butter of the States, which, it must be acknowledged, is far from perfect or from being what it might be.

In 1871 the average price of cheese exported from the Dominion was \$13.41 per hundred. The average price of butter exported was \$19.85 a hundred, or a little less than once and a half (1½) the price of the cheese. Butter should be nearly 2½ times the price of cheese.

But this comparison may be a little defective when applied to the dairy products of the whole country. Probably it is. It is pretty well understood, both in the States and in Canada, that the best cheese is exported and the poorest left at home, while in both countries the reverse is true in regard to butter. The finest butter finds a market at home and is therefore not represented in the export trade. But in the year referred to there were exported 15,439,266 pounds of butter (Report of Trade and Navigation, 1871). It must be confessed there is not a very good exhibition of skill in furnishing so large an amount of goods at so low a rate.

In 1876, according to the report for that year, there were exported 12,392,327 lbs. at a price not much better (\$20.74 a hundred). It makes a slow advance in five years. Had the milk of which this butter was made been converted and sold at the average rate of exports for that year it would have returned to the producers 25 per cent. more money, and had it been made into butter as good as the milk was capable of making it would have returned 50 per cent. more money than it actually did, calculating from the prices that were paid for fine butter that year. This is too much money to let slip away for the lack of skill and effort in producing the best instead of an inferior article. It is such losses which too often make farming a hard business, and which elicit the remark, "farming don't pay."

And there is no need of it. The milk of which this butter is made is just as good for butter as it is for cheese, and there is no valid reason why the butter of the country should not take as high a stand as that of cheese, which ranks with the highest on the continent. But why has the cheese interest shot ahead and left the butter interest lagging behind? It certainly is not because the latter is not of sufficient importance to deserve attention.

There is more value every year in the butter product—even at the inferior prices—than there is in the cheese product. It is true the cheese exports bring the most money (cheese exports for trade year ending June 30th, 1877, \$4,050,008; butter exports, \$2,579,431), but then the home trade and the home consumption in butter is much greater than that of cheese. I do not know just what the total products of butter and cheese in the Dominion are. In the States, over one-third of the total product of cheese is exported, while of butter the exports amount to only some 2 or 3 per cent. of the entire butter crop.