

PLANTING A PEACH ORCHARD — PRESERVING PEACH TREES.

It was now the season for me to bustle about, fix up my land, and get in my crops. I examined it more carefully, walked over it daily, and made myself thoroughly acquainted with it. As before mentioned, it had been utterly neglected for a whole season, and was grown up with enormous weeds. These, after a day or two of drizzling rain, when the seed-vessels were so wet as not to allow their contents to shatter out, I mowed off, gathered into several large heaps, and burned—getting rid of millions of weed seeds. Then I purchased plows and other tools. One acre of the land was in clover, another was occupied by the house, garden, stable, and barnyard; but the larger half of that acre was allowed for garden purposes. This left me just nine acres for general fruit and vegetable culture. I hired a man to plow them up, and another to follow him in the furrow with my subsoiler. The first went down ten inches, and the latter ten more.

My neighbors were extremely kind with their suggestions. They had never seen such deep plowing, and warned me not to turn up the old subsoil, and thus bring it to the surface. But they were not book-farmers.

Now, this business of deep subsoil plowing is a matter of indispensable value in all agriculture, but especially so in the planting of an orchard. No tree can thrive as it ought to, unless the earth is thoroughly and deeply loosened for the free expansion of the roots. If I could have plowed two feet deep, it would have been all the better. The first plow was a tough, forked stick, of which one prong served as a beam, while the other dug the earth as a coulter. Down to the present age, plowing was inevitably a shallow affair. But iron plows, steel plows, subsoil plows, have changed all this. It is as easy today to mellow the earth to the depth of two feet, as it was a century ago to turn it to the depth of six inches. Besides, our fierce, trying climate, absolutely requires deep plowing. Drought is our perpetual danger. Most crops are twenty to sixty per cent. short of what they would have been with adequate and seasonable moisture. That moisture exists not only in the skies above, but in the earth beneath our plants. Though the skies may withhold it, the earth never will, if we provide a rich, mellow subsoil through which the roots can descend for moisture.

The hotter and dryer the weather, the better our plants will grow, if they have rich, warm earth beneath them, reaching down to and including moisture. We cannot, and we need not plow so very deep each year to assure this, if the subsoil is so underdrained that the superabundant moisture of the wet season does not pack it. Underdraining as the foundation, and deep plowing as the superstructure, with ample fertilizing and generous tillage, will secure us ample crops, such as any section of our country has rarely seen. Our corn should average seventy bushels per acre. Every field should be ready to grow wheat, if required. Every grass-lot should be good for three tons of hay per acre. Abundant fruits should gladden our fields and enrich our tables. So should our children find abundance and happiness in and around their childhood's happy homes.

I laid out hundreds of dollars in the purchase of old, well-rotted stable manure from the city, spread it over the ten acres, and plowed up nine of them. I then set out my peach trees on six acres, planting them in rows eighteen feet apart, and eighteen feet spaced in the rows. This accommodated a hundred and thirty-four to the acre, or eight hundred and four in all. These would not be in the way of any other crop, and in three years would be likely to yield a good return. The roots of every tree underwent a searching scrutiny before it was planted, to see that

they harbored no members of that worm family which is so surely destructive of the peach. As trees are often delivered from the nursery with worms in them, so many of these were infected. The enemy was killed, and the butt of each tree was then swabbed with common tar, extending from where the roots begin to branch out, about twelve inches up. It is just about there, say between wind and water, at the surface of the ground, where the bark is soft, that in June and September the peach-moth deposits her eggs. From these is hatched the worm which kills the tree, unless picked out and destroyed.

To perform this searching operation on a thousand trees every year, would be laborious and expensive. There would also be great danger of its being imperfectly done, as many worms might escape the search, while the vital power of the tree would be seriously impaired by permitting them to prey upon its bark and juices even for a few months. Prevention would be far cheaper than curing. The offensive odor of tar will cause the moth to shun the tree and to make her deposits somewhere else; while if any chance to light upon it, they will stick to the tar and there perish, like flies upon a sheet of fly paper.

The tar was occasionally examined during the season, to see that it was soft and sticky; and where any hardening was discovered, a fresh swabbing was applied. The whole operation was really one of very little trouble, while the result was highly remunerative. Thoughtfulness, industry, and a little tar, did the business effectually. The only sure remedy is prevention. Do not let the worms get in, and there will be no effort needed to get them out.

I planted none but the rarest and choicest kinds. Economy of a few cents in the price of a tree is no economy at all. It is the *best* fruit that sells the quickest and pays the highest profit. Yet there are still large quantities of fruit produced which is not worth taking to market. The best is cheaper for both buyer and seller. Hundreds of bushels of apples and peaches are annually made into pies, merely because they can be purchased at less cost than those of a better quality. But it is a mistaken economy with the buyer, as a mild, good-flavored peach or apple requires less sugar, and will then make a better pie. Many persons have a pride in, and attach too much consequence to a tree which sprung up spontaneously on their own farm, or which they have cultivated with some care; and then numbers of comparatively worthless seedlings occupy the places that should be improved by finer varieties, and which, if cultivated, would afford a greater profit.

It is as easy to grow the choicest as the cheapest fruit. I have a relative in Ohio who has a peach orchard of eleven acres, which has yielded him five thousand dollars in a single season, during which peaches were selling in Cincinnati at twenty-five cents a bushel. It is easy to understand that his orchard would not have produced him that sum at that price. No, it did not. He received two dollars a bushel more readily than his neighbors got twenty-five cents for the same variety of peaches, and this is how he did it. When the peaches had grown as large as a hickory nut, he employed a large crew and put on one hundred and eighty-five days' work in picking off the excess of fruit. More than one-half of the fruit then upon the trees was carefully removed. Each limb was taken by hand, and where, within a space of eighteen inches, there would be probably twenty peaches, but six or seven of the fairest would be left to ripen. Thus, by carefully removing all but the strongest specimens, and throwing all the vigor of the tree into them, the peaches ripen early, and are remarkable for size and excellence of quality.

This was labor! Seven months' labor of one man in a small peach orchard! But—the net profit was between three and four thousand dollars. If he had neglected his trees, the owner's profits would have been a crop of peaches hardly fit to feed the pigs. I have profited largely by following his example, and will relate my own experience when the returns of my orchard come in.

I intend to be particular touching my peach orchard, as well for the gratification of my own pride, as an incentive to those who cannot be made to believe that ten acres are enough. My success with it has far outstripped my expectations; and I pronounce a peach orchard of this size, planted and cultivated as it can be, and will be, by an intelligent man not essentially lazy, as the sheet anchor of his safety. I was careful to plant none but small trees, because such can be removed from the nursery with greater safety than large ones, while the roots are less multiplied, and thus receive fewer injuries; neither are they liable to be displaced by high winds before acquiring a firm foothold in the ground. Many people suppose that newly planted trees should be large enough to be out of danger from cattle running among them; but all cattle should be excluded from a young orchard.

Small trees are more easily trimmed into proper shape. All experienced horticulturists testify to the superior eligibility of small trees. They cost less at the nursery, less in transportation, and very few fail to grow. One year old from the bud is old enough, and the same, generally, may be said of apples and pears. I dug holes for each tree three feet square and two feet deep, and filled in with a mixture of the surrounding top-soil and leached ashes, a half bushel of the latter to each tree. Knowing that the peach tree delights in ashes, I obtained four hundred bushels from a city soap-works, and am satisfied they were exactly what my orchard needed. Every root which had been wounded by the spade in removing the tree from the nursery, was cut off just back of the wound, paring it smooth with a sharp knife. The fine earth was settled around the roots by pouring in water; after which the mixture of earth and ashes was thrown on until the hole was filled, leaving a slight depression around the tree, to catch the rain, and the tree at about the same level it had maintained when standing in the nursery.

I did not stake the trees. They were too small to need it. Being a new-comer, I had no straw with which to mulch them, to retain the proper moisture about the roots, or it would have been applied. But the season turned out to be abundantly rainy, and they went on growing from the start. Not a tree was upset by storm or wind, nor did one of them die. I do not think the oldest nurseryman in the country could have been more successful.

This operation made a heavy draft on the small cash capital which I possessed. But small as it was, it was large enough to show that capital is indispensable to successful farming. Had I been without it, my orchard would have been a mere hope, instead of a reality, and I might have been compelled to wait for years before feeling rich enough to establish it. But when the work of planting was over, my satisfaction was extreme; and when I saw the trees in full leaf, giving token that the work had been well done, I felt that I had not only learned but accomplished much. I had been constantly on the ground while the planting was progressing—had seen for myself that every tree was cleared of worms—had held them up while the water and the earth and ashes had been thrown in and gently packed about the roots—and had given so much attention in other ways, as to feel sure that no part of the whole operation had been neglected; and hence I had a clear right to regard it as my own job.

As I am writing for the benefit of others, who, I hope, are not yet tired of peaches, let me add that this fruit will not succeed on ground where a previous orchard has been recently grown; neither can one be sure of getting healthy trees from any nurseryman who grows his on land from which he had recently produced a similar crop. The seed must be from healthy trees, and the buds from others equally free from disease. The peach, unless carefully watched and attended, is a short-lived tree. But it returns a generous income to a careful and generous grower. Of latter years the worm is its most formidable enemy. But with those who think a good tree is as much worth being taken care of as a good horse, there will be neither doubt nor difficulty in keeping the destroyer out.

Ten well-grown, bearing trees, which I found in the garden, were harboring a hundred and ninety worms among them when I undertook the work of extermination. I bared the collar and roots of each tree as far as I could track a worm, and cut him out. I then scrubbed the whole exposed part with soap-suds and a regular scrubbing-brush; after which I let them remain exposed for a week. If any worms had been overlooked, the chips thrown out by their operations would be plainly visible on the clean surface at the week's end. Having tracked and cut out them also, I felt sure the enemy was exterminated, and covered up the roots, but first using the swab of common tar, applying it all around the collar, and some distance up.

These garden-trees were terribly scarified by the worms. But the cleaning out I gave them was effectual. The soap-suds purged the injured parts of the unhealthy virus deposited by the worms, leaving them so clean that the new bark began immediately to close over the cavities, and soon covered them entirely. I thus saved ten valuable bearing trees. Then I shortened in the long, straggling branches, for the peach will certainly grow sprawling out on every side, forming long branches which break down under the weight of a full crop at their extremities, unless the pruning-knife is freely used every season. All this was the work of less than a day, and shows that if peach-orchards perish after bearing only two or three crops, it may be attributed solely to mere neglect and laziness on the part of their owners. They plant trees, refuse to take care of them, and then complain if they die early. The world would soon be without pork, if all the pigs were as much neglected. These ten trees have never failed to produce me generous crops of luscious fruit. I cannot think of any investment which has paid me better than the slight labor annually required to keep them in good condition.

PLANTING RASPBERRIES AND STRAWBERRIES.

MY peach-orchard was no sooner finished than I filled each row with raspberries, setting the roots two feet apart in the rows. This enabled me to get seven roots in between every two trees, or five thousand six hundred and fifty-six in all. This was equivalent to nearly two acres wholly planted with raspberries according to the usual plan. They would go on growing without injuring the peach trees, or being injured by them; and when the latter should reach their full growth, their shade would be highly beneficial to the raspberries, as they thrive better and bear more freely when half protected from the burning sun. The tops were cut off within a few inches of the ground, thus preventing any excessive draft upon the newly planted roots. No staking up was needed. These roots cost me six dollars per thousand, or thirty-four dollars for the lot, and were the ordinary Red Antwerp. The season being wet, they grew finely. A few died, but my general luck was very satisfactory. I planted the whole lot in three days with my own hands.

The growth of my raspberries was due to the deep plowing the land had received. The soil they delight in is one combining richness, depth, and moisture. It is only from such that a full crop may be expected every season. The roots must have abundance of elbow-room to run down and suck up moisture from the abundant reservoir which exists below. Deep plowing will save them from the effects of dry weather, which otherwise will blast the grower's hopes, giving him a small berry, shriveled up from lack of moisture, instead of one of ample size, rich, and juicy. Hence irrigation has been known to double the size of raspberries, as well as doubling the growth of the canes in a single season. Mulching is also good. One row so treated, by way of experiment, showed a marked improvement over all the others, besides keeping down the weeds.

As a market fruit the raspberry stands on the same list with the best, and one cannot produce too much. For this purpose I consider the Red Antwerp most suitably adapted. There are many other varieties, some of which are probably quite as valuable, but I was unwilling to have my attention divided among many sorts. One really good berry was enough for me. Some of my neighbors have as much as ten acres in this fruit, from which they realize prodigious profits. Like all the smaller fruits, it yields a quick return to an industrious and painstaking cultivator.

Immediately on getting my raspberries in, I went twice over the six acres with the cultivator, stirring up the ground four inches deep, as it had been trampled by our planting operations. Having eighteen feet between two rows of peach trees, I divided this space into five rows for strawberries, giving me very nearly three feet between each row. In these rows I set the strawberry plants, one foot apart, making about 10,000 plants per acre, allowing for the headlands.

In planting these I got three of the children to help me, and though it was more tiresome work than they had ever been accustomed to, they stood bravely up to it. Every noon we four went home with raging appetites for dinner, where the plain but well-cooked fare provided by my wife and eldest daughter was devoured with genuine relish. The exercise in the open air for the whole week which it took us to get through this job did us all a vast amount of good. Roses came into the cheeks of my daughters, to which the cheeks aforesaid had been strangers in the city; and it was the general remark among us at breakfast, that it had never felt so good to get to bed the night before. Thus honest labor brought wholesome appetites and sound repose. Most of us

complained of joints a little stiffened by so much stooping, but an hour's exercise at more stooping made us limber for the remainder of the day.

It took us a whole week to set out these plants, for we were all new hands at the business. But the work was carefully done, and a shower coming on just as we had finished, it settled the earth nicely to the roots, and I do not think more than two hundred of them died. I intended to put a pinch of compost into each hill, but thought I could not afford it, and so let them go, trusting to being able to give them a dressing of some kind of manure the following spring. I much regretted this omission, as I was fully aware of the great value of the best strawberries, and plenty of them. My wife thought at first that six acres was an enormous quantity to have—inquired if I expected to feed the family on strawberries, and whether it was not worthwhile to raise some sugar to go with them, feeling certain that a great deal of *that* would be wanted.

I forgot to say that I had planted Wilson's Albany Seedling. This was the berry for which we paid such high prices while living in the city. Everybody testified to its being the most profuse bearer, while its great size and handsome shape made it eagerly sought after in the market. While a bit more tart than some varieties, my family always sprinkled sugar on their strawberries before eating, so we were not deterred by their slight tartness. My wife simply stated that, since I had chosen to plant a more tart strawberry, we would simply need to buy sugar more often.

Now, although she was extravagantly fond of strawberries, and had brought up our children in the same faith, this threat did not alarm me, for I knew that hereafter our berries would cost me nothing, and that if they devoured them too freely, sugar included, a slight pain under the apron of some of them would be likely to moderate their infatuation. I then suggested to her, how would it do—whether it would not make our establishment immensely popular—if in selling my berries, when the crop came in next year, to announce to the public that we would throw the sugar in? She looked at me a moment, and must have suspected that I was quizzing her; for she got up and left the room, saying she must go into the kitchen, as she heard the tea-kettle boiling over. But though I waited a full half hour, yet she did not return.

The reader may have been all this time watching the condition of my wallet. But he has not been so observant as myself. These plants did not cost me cash. I had intended to plant an acre or two to begin with. But after buying my peach trees and raspberries, the nurseryman inquired if I did not intend to plant strawberries also, as he had a very large quantity which he would sell cheap. His saying that he had a very large lot, and that he would sell them cheap, seemed to imply that he found a difficulty in disposing of them. Besides, the selling season was pretty nearly over. I therefore merely inquired his terms. This led to a long conversation between us, in the course of which I held off just in proportion as he became urgent. At last, believing that I was not disposed to buy, although I went there for that very purpose, he offered to sell me 60,000 plants for \$120, and to take his money out of the proceeds of my first crop. This offer I considered fair enough, much better than I expected; and after having distinctly agreed that he should depend upon the crop, and not on me, for payment, and that if the coming season yielded nothing he should wait for the following one, I confessed to him that his persuasions had overcome me, and consented to the bargain.

In other words, I did not run into debt—I saved just that much of my cash, and could make a magnificent beginning with our favorite fruit. As I was leaving this man, he observed to me:

“Well, I am glad you have taken this lot, as I was intending to plow them in tomorrow.”

“How is that?” I inquired, not exactly understanding his meaning.

“Oh,” said he, “I have so many now that I must have the ground for other purposes, and so meant to plow them under if you had not bought them.”

This was an entirely new wrinkle to me, and fully explained why he could afford to farm them out on the conditions referred to. Though a magnificent bargain for me, yet it was a still better one for him. What he was to receive was absolute profit on something he was going to destroy the next day. But then, after all that has been said and written, is it not a truth that cannot be disputed, that no bargain can be pronounced a good one unless all the parties to it are in some way benefited?

Here, now, were six acres of ground pretty well crowded up, at least on paper. But the strawberries would never grow higher than six inches; the raspberries would be kept down to three or four feet, while the peaches would overtop all. Each would be certain to keep out of the other's way. Then look at the succession. The strawberries would be in market first, the raspberries would follow, and then the peaches, for of the latter I had planted the earliest sorts; so that, unlike a farm devoted wholly to the raising of grain, which comes into market only once a year, I should have one cash-producing crop succeeding to another during most of the summer. On the remaining three acres I meant to raise something which would bring money in the autumn, so as to keep me flush all the time. You may say that this was reckoning my chickens before they were hatched; but you will please remember that thus far I have not even mentioned chickens, and I pray that you will be equally considerate. I know, at least I have some indistinct recollection of having heard that the proof of the pudding lay in the eating. But pray be patient, until the aforesaid mythical pudding is served up. I am now cooking it, and you ought all to know that cooks must not be hurried. In good time it will come smoking on the table.