Garden, Orchard & Forest.

VALUE OF PLANTING ORNAMENTAL TREES AND SHRUBS IN HOME GROUNDS.

The question of actual profit in dollars and cents, in planting ornamental trees and shrubbery, is not to be so exactly shown as it has been with fruit trees, yet there is a vast profit herein, not limited to the immediate advantage of the planter or purchaser of the property so embellished. Who can have failed to note that when a piece of real estate is offered for sale, its ornamental trees and plants (if well selected and in good culture), always add a charm, which finds recognized value in the increased price paid by the buyer?

Is there not profit in planting and caring for good trees and plants for ornament?—Every farm and orchard, every street and highway, every public square, park or cemetery, needs its ornamental planting, and all property adjacent is increased in value where it is done. On the farm, near the orchard, and near the house, and on the highway, ornamental (not less than useful) screens of deciduous or evergreen trees, are more or less necessary (if nature has not provided in advance) as protections from wind and storm. Any farm, orchard or vineyard so protected will yield a larger annual return, and will come earlier into ripening, and consequently the value of the property will be increased. A dwelling embowered in trees is manifestly more comfortable in all seasons of the year, and must be more healthful in consequence of the equalized temperature produced thereby, and of course enhanced in value by this important aid.

It has become a common subject of remark and study—the influence of trees on climate and crops, as evinced by the destruction of our native forests by the woodman's axe.—On the Western prairies we now see forests and groves springing up and carefully cultivated to protect farms and houses from the effect of storms and blighting, hot winds, and to furnish timber and fuel. Who can tell of the great increase of value to accrue from these groves and from the vast lines of beautiful hedges now growing up in the West, to take place of unsightly fences?

Every homestead requires its arbor of vines, its screens of evergreen trees, and its beautiful hedge rows, for the seclusion they afford and to keep out of view objects not proper to submit to the public eye. Every porch, and every approach to the home claims the grateful shade of some over-arching tree, or the welcoming smiles of plants of beautiful foliage and fragrant flowers.—*Horticulturist.*

ORCHARDS IN GRASS.

If a man desires fruit for himself and family only, and is indifferent as to the time he gets it, and indifferent about the quality and quantity, then he may plant his trees in grass ground and keep them in that condition; but if he intends to make the business of fruit-growing a dependence for a livelihood, he would hardly be satisfied to wait from twelve to fifteen years for results that might be obtained by good culture in seven or eight years; nor would he be likely to be pleased with the moderate returns from common or inferior fruit, while his neighbor was receiving high prices for a superior article grown on ground where fruit was the only crop.

It is true that there are soils so rich that culture would give trees an excessive growth, and not only postpone fruitfulness, but make them liable to be injured by the severe winters.

An experienced horticulturist would not choose such a soil for an orchard.

One great advantage of having the ground under culture is that it enables the orchardist to give his trees a more uniform growth, without regard to condition or unfavorable seasons. If his trees are loaded with fruit or the season unusually dry, a more frequent stirring of the surface will generally keep up the desired vigor, but if the trees are in grass and the season very dry, he is powerless to help the case and can only watch and worry to see his trees almost cease to grow, the leaves turn brown and the fruit drop for want of sustenance, and perhaps gets very little consolation as he listens to his neighbor's merry whistle while following his cultivator or harrow through his orchard, unconcerned about the weather and wicked enough perhaps to wish that everybody else believed in the "grass theory," so that he will be able to get an extra price for his extra fruit. —*Horticulturist.*

HOW TO WATER PLANTS.

From careful experiments Mr. Mechi discovered that plants slightly watered every day often perish, and always become dwarfed; whereas, a good soaking, given twice a week, almost invariably proved very beneficial. He says:—

The sum of our experience in watering amounts to this—that thorough soaking of the ground two or three times a week is much better than the same amount of water applied in driblets daily, only sufficient to wet the upper surface, but not the under strata of earth contiguous to the roots. Cold spring water should, before applying it to a heated soil, be allowed to stand exposed to the sun and air for a few hours. The colder the water is and the warmer the soil, so is the necessity of applying it in abundance; for it is evident, though we cannot explain it, that the result produced upon plants by applying cold water to the soil, when at a high temperature, unless so copiously applied as to saturate the soil completely, is fatal to tender or weakly plants, and often more or less injurious to strong or healthy ones.

CULTIVATING FRUIT TREES.

Some writers tell us not to cultivate our fruit trees, as it produces an undue excitement or growing power in the tree, which predisposes to premature death. We don't believe their theory. Our experience is on the other side of the question, and we go in for thorough cultivation at least for a time—until the trees get well started.

In the fall of 1857 we set out 50 apple, 12 pear, and 6 cherry trees, on a piece of ground inclining to the south and west, on which a crop of rye had been gathered a few months previous. The holes were dug 18 inches deep and three feet in diameter; the top soil thrown by itself, and before setting the trees was thrown in the bottom of the holes, at least as much of it as would fill up to the right depth for setting the trees. The subsoil was well incorporated with barnyard scrapings which were thoroughly rotted, and then thrown in around the roots of the trees, being careful that none of the manure came directly in contact with the roots—having saved enough surface soil to cover the roots. The roots were all nicely cut off with a sharp knife at the ends, in a slanting direction, and the tops thoroughly trimmed before setting. The following spring the ground was plowed and planted to potatoes, which brought in market more than enough to pay all the expenses thus far incurred. The soil being rather poor the potato crop was light, only 125 bushels. The orchard contained 1¾ acres. The trees all lived, and made from 12 to 24 inches growth the first season.

Potatoes were planted among the trees year after year, for 8 or 9 years, with one exception; beans were planted among them that year; and they always sold for more than enough to pay all the expenses incurred.

During this time we manured the orchard twice with barnyard manure, spreading it over the whole surface, except directly around the trees, a space of 6 or 8 feet in diameter was left without any.

Manure to do the tree most good should be put at the outer end of the roots, and not around the body; this is our theory and we practice accordingly.

These trees commenced bearing the third year after being set, and made 18 inches growth on an average each year during the above mentioned period.

A distant neighbor bought 100 apple trees of the same lot as mine, and set them in a stiff timothy sod, and the consequence was at the end of three years nearly one-half of the trees were dead, and those alive had made hardly any perceptible growth during the three years. At this time but few of the 100 trees are left, and those of little value, while those we set are furnishing apples in large quantities. The pear and cherry trees have done equally well.

The white borer gave me more trouble than anything else among my trees. During the first summer, before I was aware of their depredations, they had gained a foothold, but their stay was of short duration. I took my pocket-knife and cut every one of them out. I found as many as 8 worms each in several of the trees.

The following season I took hardware paper and cut it in strips 8 inches wide; then thoroughly tarred one side and wrapped it around the collar of the trees, first scraping away the soil down to the roots, and after putting on the paper replaced the soil. This proved effectual. One year I tried scraping the trees. The soil was removed down to the roots, and then a piece of hard soap thoroughly rubbed on the bared roots and trunk of the trees, to the heighth of 8 or 10 inches. This also proved effectual, excepting one or two trees.

In using the tarred paper, a string should be tied around the tree near the upper end of the hardware paper, to keep it close to the body of the tree. The string should be loosened as the tree enlarges, or it will harm the tree. New paper will have to be used each year.

Thousands of dollars are paid out yearly by farmers for fruit trees, which is so much money thrown away as far as they (the farmers) are concerned. They are fond of good fruit, and expend their money liberally for fruit trees, but will not give them the required attention after setting them out.—*Fruit Recorder.*

THE PROTECTION AND PLANTING OF FOREST TREES.

The time has arrived when, in many parts of our country, the want of forest trees for the purposes of building, fencing, fuel, shade, shelter and general effect in the landscape, is being keenly felt. It is, therefore, plain enough that in the clearing of farms great care should be taken to leave belts and masses of trees; for, although single trees and little groups, when stripped of the protection of larger masses, may not be able to withstand the elements, still those of greater extent serve the most desirable purposes both for use and ornament.

The mania in many regions of the country for stripping the whole face of nature of every tree and shrub, is so great as to destroy some of the finest effects of the most charming landscapes. Would it not be well to use great judgment in deciding what trees should be cut down?

The tree, a hundred years in growing, may be cut down in an hour! Then let the noble and beautiful trees, save when they have to be removed for the purposes of profitable cultivation of the soil, be protected rather than destroyed, and let our young men plant young trees. They will benefit their children if not themselves, and serve as very expressive momentoes of their usefulness. The snow, nature's overcoat for the soil, is drifted in the absence of shelter from the high winds, and in many instances, in the absence of trees, our crops are laid bare to the biting blasts of winter.

TO PROTECT YOUNG TREES FROM MICE IN WINTER.

To protect young trees from mice during winter, I have found that making a little mound or hill around the body and keeping the ground clean were about as good preventatives as I ever tried. In taking care of an old orchard I would graft every tree that does not produce good, profitable fruit, unless the tree is on the decay; in that case I think it would be useless. A person who has not tried the experiment would be surprised to see in how short a time an old tree can be renewed. If you cannot do it yourself, employ a reliable grafter, and he will bring about a great reformation in your trees in about three years. Many people make a great mistake in cutting off all the top of a tree the next year after being grafted; the consequence is, in nine cases out of ten, the tree dies. You should be at least three years cutting off the natural limbs; by that time the grafts will be grown so they can take the place of the natural branches. It is a good plan to scrape off the rough bark of old trees early in the spring, and keep the ground well cultivated, or if kept in sod, well manured around the trees.

DAMAGED TIMBER.—Although the damage done to crops, buildings and fences by the 4th of July tornado in this part of the country was very great, yet, the greatest damage by far was that done to the timber. It is not an uncommon thing to find fine groves of timber of ten, fifteen or twenty acres, almost or entirly stripped clean of every tree on it of any size above six inches in diameter, and those of a lesser size which are left standing are so badly injured by the falling ones that they will decay. And what is worse still is that although the timber may be cleared away the land is left unfit for use for many years by reason of the huge upturned roots on every few yards. A hundred thousand dollars would not compensate for the loss of timber in this county alone.—*Fond du Lac Journal.*

THIN OUT THE FRUIT.

It is a good time now to remind fruit growers about thinning out fruit. With young trees this matter is especially important, and perhaps with no tree more than the pear. The policy of allowing young trees to bear all they will is simply ruinous. In some cases a grower may get more money from his orchard during the current year by adopting this course, and yet that does not always follow. But, if he does, he will most assuredly have to pay for it in future. What a sagacious man wants to secure, when his orchard is young, is growth—not an extraordinary, but a healing growth. Then, when the tree commences bearing, they will be able to bear good crops at once, large enough to make up in a few years for not bearing when quite young. As a matter of fact the crops borne by quite young trees are always small, but at the same time are such great drawbacks on the strength and vitality of the trees as to impede their developement most seriously, causing them to fall so far behind other trees that a stranger would think them several years younger. The limbs, too, being tender, become distorted by the weight of fruit, and a habit of early bearing being also induced, there will be an annual tendency to produce fruit instead of wood and foliage, accompanied by an inability to perfect it, which will increase from year to year until the poor thing dies prematurely. Then the short-sighted grower, who was in hurry for fruit and profits, can place another in its place and mournfully tell his neighbors of his hard "luck."

I am well satisfied that in planting an orchard, if the owner would make a vow not to allow a single tree to bear a solitary specimen for the first seven or eight years after planting, and would give his time and attention to perfecting the growth of his trees, and to pruning them properly, he would get more money from his orchard at the end of, say fifteen years, and have a much finer orchard than would otherwise be the case. The trees would be more uniform in growth, be large, better shaped, have a better developement of roots, thus enabling them the better to withstand high winds or tempests, bear greater crops, and look better—in short, be better in every conceivable way. If the owner wanted to sell his place, such an orchard—thrifty, vigorous, well-shaped, large for its age, uniform in size, with clean, healthy-looking bark, and limbs not twisted or deformed by premature bearing—would constitute an attraction which an appreciative purchaser would find it hard to resist. An orchard of 500 such trees would have more charms for him than one of a thousand which had been suffered to bear at will ever since planting, with the trees more or less stunted, twisted, irregular in size, and exhibiting all the other defects peculiar to premature bearing.

Some may claim that heavy application of manure to young bearing trees will make due amends, and maintain growth and vigor. I do not think that this is the case at all. If a tree is allowed to over bear this year, its constitutional vigor is impared; it becomes sick, in a measure, and it is no more in the condition to appreciate the benefits of this exceptional manuring than a sick man is to appreciate extra good eating while his illness lasts. What is important in the orchardist to remember is that fruit-bearing and a regular, healthy growth in young trees cannot go forward at the same time; that growth is the natural business of a young orchard, as it is of human being and animals; and that fruit-bearing—which is reproduction of that species—cannot safely or profitably be attempted until there is at least some approximation to a full growth and developement.

The wise fruit-grower will then not neglect thinning, and now is just the season for it. There is far more danger of leaving too much than too little. Every imperfect specimen, every one stung or marred by insects, had better come off. What is left will be the better for it—will be larger, better perfected, bring more money, more credit, and cost less for marketing. The trees will suffer less, because they have less seeds to perfect. They will grow better, look better, sell better, and make their owner feel better. Be patient in fruit-growing as well as other things.—*Cultivator.*

Ebony wood weighs 83 lbs. to the cubic foot; lignum vitæ the same; hickory, 52 lbs.; birch, 45 lbs.; beech, 40; yellow pine, 38; white pine, 25; cork, 15; and water, 62.