

FOR FARMERS AND GARDENERS.

Planting Fruit Trees.

Now is a good time—as early in the spring as the condition of the soil will permit.

In the upper wards of this city, peaches flourish best—in fact, in many of the lower wards, tho' the trees seem to thrive pretty well, they bear but little fruit, and that generally of an inferior quality. The apple, plum, apricot, etc., however, are found more productive and, in those localities, should be cultivated in preference to the peach, which seems to be peculiarly adapted to the soil and situation of the "bench lands" or those in that vicinity. But these lands are generally gravelly and sometimes quite rocky, and deep and thorough trenching are requisite to their vigorous growth and remunerative bearing.

We need not reprint the excellent directions repeatedly given in previous years for transplanting trees. But, lest the absence of sufficient quantities of bones, oil shoes, and other litter, should deter some from planting trees this spring, we would suggest the plan of digging holes, say two feet deep and three feet in diameter; in which plant your trees, throwing the best of the top soil around the roots and, as you accumulate old rubbish, shavings, ashes, etc., etc., spread it around your trees for a mulching.

In laying off the ground for an orchard the "Diamond" or "Hexagon" plan recommended by L. S. Hemenway, is worthy of attention.

While the trees are young the intervening ground may be planted in potatoes or vines. When they begin to bear, that portion of the ground that is not shaded by the branches, if well manured, may still be cultivated without particular detriment to the trees; and when this is no longer practicable, the soil should be loosened yearly, great care being taken not to injure the roots. Carefully mellowing the soil around the trees, liberally applying vegetable manures, bone dust, ashes, etc., and mulching, if aptly attended to and yearly repeated will eventually in a great measure secure the benefit arising more directly from incurring greater expense and bestowing more labor at the time of transplanting. Manures should not be put immediately at the body of the trees, but scattered around, so that the fibrous roots can absorb them, and that the tree may be induced to send out roots in quest of food.

It has been recommended by some to plant an inch or two deeper than the tree grew in the nursery. A pomologist who evidently prides himself on his knowledge of practical arboriculture, in speaking of the depth of planting trees, says:—"A tree is sometimes too deep in the nursery—the body should never be planted deeper than the crown roots."

Washing trees once or twice a year with strong soap-suds has been found advantageous.

Never cut off a large living limb from a healthy trunk. Severe trimming is detrimental.

Every man who has a lot of ground should have an orchard, whether a large or a small one. All who wish may obtain the ground. Whoever has an orchard, should make himself acquainted with the most approved methods of grafting, budding, pruning and "doctoring" trees. He should also acquaint himself, by diligent and systematic experimenting, with the "times and seasons" for performing these operations, and all other operations that will tend to the most perfect development of his trees and the culture of those known standard varieties, which yield a delicious harvest, richly remunerating him for whatever care he has bestowed and doubly so where the skill of experience has directed his labors.

Early Turnips are much prized for table use. Plant as soon as the ground will permit.

The Purple-Topped Ruta Baga is a most profitable variety for field crops.

The seed of this Ruta Baga—as well as that of the Yellow Globe Mangold Wurzel, the White Sugar Beet, and Long Red Carrots—may be obtained, in considerable quantity, of E. Sayers, Gardener, 12th Ward.

The White Sugar Beet, for feeding, or for syrup, may be sown about the middle of the spring. If sown very early, the young plants of this as well as the blood beet make excellent greens.

The Mangold Wurzel is considered better for feeding than the beet.

Parsnips—This excellent root, which is so generally sought for in the spring, should be grown in the deepest and richest soil. On high grounds where there is no frost, plant the seed without delay.

Early Potatoes.—Don't forget that they are very good.

Depth of Planting Seeds.

Much depends upon the soil and the kind of seed. A proper degree of warmth, moisture, darkness and presence of air are conditions most favorable to germination. Where these conditions are not obtained, seeds either remain sound and fail to germinate, or decay and perish.

In porous and gravelly soils, like our "bench lands," seeds will not only grow from greater depth, but they require deeper planting.

If buried too deep, very small seeds will be most certain to rot, or, if they germinate, to perish before they penetrate the surface. However, we may safely assert, as a general rule, that "the nearer to the root the seed leaves can come out—that is, the shorter the stem between them—the more vigorous the plant."

Doubtless, if some means were devised for depositing our seeds at the proper depth, there will be a great saving in seed and the crops would be heavier.

A French agriculturist, Mons. Moreau, to determine at what depth of planting wheat would yield the most, "formed thirteen beds, each of which was planted with 150 grains at different depths, and the following table shows the results:"

Depth of inches.	Those which came up.	Heads.	No. grains gathered.
Seven	5	53	320
Six and a half	11	140	1,208
Five and three-fourths	20	174	2,071
Four and a half	40	400	6,327
Four and a quarter	72	700	10,426
Three and three quarters	92	992	18,534
Two and three-fifths	123	1,417	35,434
Two and a half	130	1,560	34,319
Two	140	1,590	36,480
One and three-quarters	142	1,660	35,815
One	137	1,461	35,072
Half	61	629	10,537
On the surface	20	107	1,600

It will be seen by the above table that the seed planted at the depth of two inches yielded the largest number of grains.

The Coffee Plant was not much known at the time of Columbus' discovery; it grew in Arabia and Upper Ethiopia. Its use as a beverage is ascribed to the Superior of an Arabian monastery who introduced it to prevent the monks from sleeping while performing their nightly devotions. Two hundred years afterwards, namely, in 1614, a single plant was brought to Paris, which became the parent stock of the coffee of the West Indies.

In the United States alone, it is estimated that some sixteen million dollars worth of coffee is consumed annually.

There are now several varieties of coffee in commerce, but the Arabian or Mocha is the best; its bean is small and of a dark color; Java and East India, next best, are larger and of a pale yellow color; the West India Rio has a mixed tint of blueish green and grey.

Dr. Livingston speaks of the coffee tree growing through Angola, Africa, large enough to be used for timber, tho' the average height is from eight to ten feet.

Some claim for Africa exclusively the production of the celebrated Mocha coffee. A writer in the *Colonization Journal* observes, "the fact is, that while the coffee is shipped at Mocha, its real origin is from the mountains of Equatorial Ethiopia."

The seed soon germinates, being planted before the rains, and, when the tree is six months old, it is transplanted.

The yield from a full bearing tree is from thirty to forty pound—gathered in March and April.

A white, milky-looking pulp, called *gullaboo*, protected by a thick skin, surrounds the coffee bean, which, by continual free ventilation out of doors for a month, becomes dry enough to remove. The *gullaboo* is sold for a beverage, separately from the seed. When planted the seeds are not divested of this husk.

In Caffa and Enarea, Africa, coffee grows wild like a weed.

The Tea Plant.—Br. D. Graves informs us that, in the spring of 1856, he planted, in light sandy soil, some seeds which he obtained from berries in the tea. Before planting he soaked the seeds about six hours and put them in the sun some six hours more. He kept the ground moist till they came up.

He says his plants are thrifty, hardy and require no covering up in winter. When he gathers the leaves, will he send us a specimen of his tea? Perhaps he will want us to give it a name.

We will state, in this connection that the commissioner of Patents at Washington has just received from China, bills of lading for large quantities of tea seeds packed in earth; also the Yang-nae tree and its seeds; seeds of the Camphor, the Tung-oil and Oo-dang trees.

The fruit of the Yang-nae is much esteemed in China; the Tung-oil yields an oil valuable to mechanics; the Oo-dang is richly ornamental.

Sugar from the Sorghum.—That the Chinese cane will produce sugar seems to have been abundantly tested by some of the most practical and scientific gentlemen of the Union. Professor Lawrence Smith, of Louisville, Ky., gives his experience and says that the "result settles the question that the bulk of the sugar contained in Sorgho is crystallizable, or cane sugar proper."

But, as we have before stated, the seeds must fully ripen, as an indispensable condition for securing crystallization.

Machinery will probably be in operation ere long in this Territory, for the manufacture of sugar as well as syrup, from the Sorgho; and, should this be accomplished in time for the working up of the present season's crop, the cane will be in great demand; but, in case sugar making machinery should not be set in motion in time to work up the cane of the present year, there will be no loss sustained by those who may enter extensively into its cultivation—for there will be every facility afforded for manufacturing the syrup—and there is little fear of the supply being greater than the demand.

Farmers will find it a profitable crop.

Besides those already alluded to, there are various methods of planting the Sorghum seed. A gentleman who has had some experience in cultivating the cane in Utah recommends two methods—either of which, he thinks, is preferable all others, for this dry climate.

1st. Plant in rows three feet apart, each seed in a row about eight or ten inches apart.

2d. Plant in hills, three feet by two apart—from six to eight seeds in a hill.

He also suggests that more syrup may be obtained from a given area, by pulling out the more backward shoots—leaving some four or five stalks in a hill.

These young shoots are excellent for feeding milk cows, and, by removing them, those that remain obtain a ranker growth and the seed ripen more uniformly.

He also urges the time of corn-planting as the most proper time for planting the cane seed, to insure its ripening and the largest yield of syrup—instead of June or July—as printed in No. 3—which should have read about the middle of May.

Asparagus.—Those who have or can obtain the manure may start a bed by digging a trench two or three feet deep and of such dimensions, as will suit their wants or the amount of compost they wish to devote to that object—about half soil and half manure, thoroughly mixed, being a good proportion.

Good sized roots of one year's growth are probably the best for making beds.

Lay off the beds four feet wide, draw two drills two feet apart and plant the roots in them, one foot apart, and cover four inches deep. To facilitate irrigation, let the length of the bed be laid off parallel with the direction in which the water runs.

In the fall, after clearing off the stalks, spread on a covering of manure, which, very early in the spring, should be forked in, at the same time adding a sprinkling of salt, where there is not already sufficient in the soil.

It is not best to cut over a new bed till the third year.

Fences.—As soon as possible have them repaired, where they are broken down, that your own gardens may be protected against the incursions of stray animals, and also that your neighbors may not have cause to complain of your negligence.

The fences in some parts of this city are in a very dilapidated state, and, in some instances, there may have been good cause for it. The Kanyons have been almost inaccessible for some time, but the snows will soon give way before the warm sun, and, as soon as fence timber can be had, we trust that good and substantial fences will be erected, if not around every man's lot, at least securely inclosing each block.

A Disease—in Ohio—among cattle, called "black leg" by some, by others "hoof ail," is making serious havoc among horned cattle. Commencing in the hind feet it extends upward and soon paralyzes the parts so that the animal is brought down on its hind quarters. The disease is attributed to ergot in the grass and grain.

Guano—sea-fowl manure—is a lucrative branch in commerce. The Peruvian government and its agents have realized the enormous sum of twelve million dollars for this article during the year 1858. It is selling in the eastern markets at \$32@40 per ton.

Beets and Carrots.—For early use, should be sown as soon as the ground is suitable for working. A deep rich soil is almost indispensable to their profitable culture.

The New Jersey Agricultural Society, at their late annual meeting, elected Gov. Newell, President, and a Vice President in each congressional district of the State, with an Executive Committee of one from each county. The receipts during the past year were \$8,974.89, including \$1000 from the State. Expenditures, including premiums and incidentals, \$8,145.45.—Balance in treasury, \$99.45.

In Texas—corn planting was mostly done before the close of February. Not much cotton had then been planted. The wheat crop, which would be reaped in May, promised an abundant yield.

A Calf—Weighing 110 lbs. the morning after its birth was lately born in Harbortown, Mercer county, N. J.

A Hog—Was lately slaughtered at Somerton, Pa., 16 months and 15 days old, weighing 691 lbs.

CULTURE.

The sovereign antidote for all the shamfooleries of this world is labor—physical labor, on the part of every able-bodied man and woman in getting a living. In conjunction with this, and to give all an opportunity to labor, as well as to force the lazy to obey the Scripture in this behalf, we must have land monopoly abolished, and the whole system of legislation rescued from the control of the speculators.

Herein is embodied the soul of my philosophy, which I have preached for twelve years, and which I have been attempting to practice. I have written some for the *Cultivator*, and I suppose two thirds of your readers have said, "That will do for theory, but the practice is another thing; at all events, Hine is the last one that will practice what he preaches."

Well, my practice consists in horticulture and fruit culture in the hardest possible mode, to wit, with spade and hoe. I have demonstrated the fact that I can get a good support for my family all told, and entertain a host of friends, from a patch of ten acres, distributed as follows: two acres in pasture, three acres in cultivation, and five acres in a grove of forest trees for pleasantness. I have proved that my own and my family labor on the said three acres will give us food and clothing and give me two thirds of my time to spend in reform! Our family consists of self, wife, and two small children—one seven and one three years of age; also a woman who lives with us to afford company for my wife when I am gone. We have just completed the harvest of 44 bushels of strawberries from one quarter of an acre of ground, and perhaps if we had not fed such a multitude of ground-squirrels, birds, etc., the yield would have been 50 bushels. At all events had the whole patch been in good condition, the yield would have reached that amount, or at the rate of two hundred bushels per acre! Has any one in these United States produced an equal crop on the same quantity of ground? No doubt on a square rod garden patch the like has been done.

Next season we shall nearly double our strawberries and have in addition a tide of raspberries. One can start on two acres, near some large town or city, and from a quarter acre each of strawberries, raspberries, gooseberries, and currants, have in two years an income of \$300, and in three years of \$500. Then remains another acre on which he can raise all his food, except wheat. With an ordinary family, \$200 of money will clear all his other expenses, and there remains \$300 for books, railroad excursions, papers, periodicals, etc.—if he is a wise man—or for investment on speculation if he is a fool.

All this can be done by a practical man like yourself and—modesty forbids me to say who else. I can take any acre of land that is not barren, on any railroad, and get from it a good living for a family. I know whereof I speak, and those who sneer at the theorist may get out of the way for they're unlucky.—[L. A. Hine in the Ohio Cultivator.]

Vegetable Physiology.—In your issue of August 12th, at page 93, Mr. Howatt makes a statement which I do not wish to see pass unnoticed, or at least without some qualification. He remarks that "any gardener will tell you that if he wants to promote the growth of a plant, he will check it by pinching in or cutting it back." This is unsound doctrine. I frequently practice pinching off young growths in order to insure certain conditions or desirable forms in plants, but I do so fully aware of its weakening influence, and every gardener is, or ought to be, aware of the fact.

When it is desirable to encourage vigorous wood growth, it will be attained by pruning back after the wood is matured, and the plant at rest. We then destroy the balance of power, and give the roots the preponderance. But this does not "promote more growth to the root," it only throws the strength of the plant into fewer channels, just as we throw two or three streams of water into one; we will have a larger and stronger stream, without increasing the supply of water.—[William Saunders, in Country Gentleman.]

Wine Making.—Nicholas Longworth, of Cincinnati, offers to give a silver goblet of the value of one hundred dollars, or that sum of money, if preferred, for grapes that will be superior to Catawba, for the purposes of wine—the decision of the question to be left to the Ohio Vine Growers' Association.

Prize Stock.—Mr. Barrett, an American gentleman, who has large estates in Kentucky, has shipped at Derry, for America, almost all the prize stock he could get from the late royal shows in England and Ireland. The freight alone will cost \$4000.