

AGRICULTURAL



SUMMER IS GONE.

The tedded hay, the first fruits of the soil,
The tedded hay and corn sheaves in one field,
Show Summer gone, ere come. The foxglove tall
Sheds its loose purple bells, or in the gust,
Or when it bends beneath the up-springing lark,
Or mountain flock alighting. And the rose
(In vain the darling of successful love)
Stands, like some boasted beauty of past years,
The thorns remaining, and the flowers all gone.
Nor can I find, amid my lonely walk
By rivulet, or spring, or wet roadside,
That blue and bright-eyed flow'et of the brook,
Hope's gentle gem, the sweet forget-me-not!

COLERIDGE.

GARDEN AND ORCHARD FALL WORK.

The following hints from the late A. J. Downing, of Pennsylvania, an experienced pomologist may not be entirely inapplicable to Gardeners and Orchardists in this country, though it is too late in the season for very extensive operations in some things therein suggested this fall:

When the month of November comes, it is worthwhile to look about a little, and see how you stand in the garden and orchard. You must be a miracle of expertness if you have not failed in some crop or other, or if some tree or plant has not baffled your wits. Well, this being the case, now is the time to look about, and resolve either that you will succeed better next year, or that you will abandon that crop altogether.

So, go into your kitchen garden. If your soil is poor, or worn out, and full of insects, this is the very time of all others to doctor it, and here is my prescription, which I have proved over and over again. Clear off the plot of ground to be renovated, and cover it with a good dressing of fresh stable manure, with the litter in it. Begin at one side of the plot, and throw up the soil into ridges, digging it about eighteen inches deep, and mixing the manure through the soil as you dig. Here let it lie all winter. The atmosphere and the frost will have a grand chance to do their best in bettering the quality of the soil itself; and the essence of the manure will not only be all taken up by the soil, but its coarseness will be broken down by the spring, so that your plot will be in the best possible order for vegetables, when the swallow comes.

If you are troubled with grubs and insects in the ground, (and you must be something more than a "big bug" yourself, if you are not,) then you must also treat it with a dose of salt. Scatter any refuse or coarse cheap salt over the earth, before you begin to ridge it up, at the rate of a bushel to the eight part of an acre—or eight bushels to the acre. Put on this season, it will do no harm to anything vegetable, and will thoroughly rid you of these enterprising little gentry, that crawl out of the ground in May and June, and quietly play Guy Fawkes to the roots and stems of the tenderest things that the pot boils. Besides, leaving out of sight the virtue of salt as a manure, it helps all dry soils amazingly, giving them greater attraction for moisture, and greater power to hold it in dry weather; and that is no mean thing for a crop that gets thirsty in midsummer.

In the review of your forces at this season, before they go into winter quarters, it is ten to one but you will find, staring you in the face—possible not ten paces from your doorsteps—some excellent old friends, whose acquaintance you begin to be ashamed of, and are sorely tempted to cut at once. I mean some good old fruit trees, still very sound and healthy, but utterly refusing, for years past, to bear any good fruit. Possibly they are Virgalieu, or butter pears, Pippin, or Pearmain apples, whose good name is a thing handed down to you by your ancestors; and you are therefore not a little sorry to cut them. Don't do it. Let us have a little talk over these trees.

Did they ever bear good fruit in this soil? "Bless you, yes;—such fair golden skins, and luscious, melting flesh, as I seldom see now-a-days." How long ago is it that they have stopped bearing such fruit? "Say a dozen or fifteen years." What have you done for them? "Not much—scraped the bark, washed it with soapsuds—spread a little compost over such as stand in the grass. Those that stand in the garden, you know, are in good, rich soil; so, of course, they could not want for manure."

This is what my friend says; but I don't believe a word of it—I mean of the last part, that they "don't want for manure." If I was a "Hoosier," or a "Buckeye," I should say they don't want "anything else." Have they not the same atmosphere to breathe, the same rain to drink, the same climate to enjoy, as when they bore the fine crops of fruit which you lament? What has changed? Nothing—absolutely nothing—but the soil.

Need I go any further to establish this? I hope not. But the soil is pitifully run out—run out, past the power alone of stable manure to bring it up again. It is run out, as the chemists say, in "lime and the phosphates."

But it can be renovated, just as surely as there is manure, and lime, and the phosphates

to be had; and you may set about it now, if you please, for this is the best time in the world to begin.

Now, to do this well and thoroughly, will cost from two to three dollars a tree, labor and all included. An old officer of this sort, that has been off duty and on half pay for ten or fifteen years, can't be brought into active service again without squaring up old accounts somewhat, and you must make up your mind to this, or else have no further fruits from the old veterans.

Supposing we commenced with a middle-aged pear or apple tree, with a sound constitution, which has been sulking for some time past on half pay. Now, it is all very well to say that this tree don't want animal manure. Its roots have been in the same place for twenty-five or thirty years, with only a little sprinkling of something stimulating over the tops of the soil, which the grass, indeed, has pretty much to itself, or a slight yearly dressing of compost (if it has stood in the garden) which the vegetables have devoured. Look at its little short-jointed shoots and unthrifty growth, and you will see that, first of all, it wants manure.

Very well. Now clear away everything in the shape of trees, shrubs, bushes, or vegetable of any kind that stand within fifteen feet of the trunk of this tree. Next, bring a good two-horse wagon load of fresh stable manure, and trench it under as deeply as the roots will let you, and particularly beyond where the roots extend. It is as foolish to put manure within five or six feet of the trunk of a tree, as it would be to pour drink over the back of a thirsty man. At the very outside of the roots, trench the soil two feet deep, and mix the manure with it, leaving it rough and loose for the winter; for it is there—at this outside limit—that the roots will get a good living again.

But this is not the whole which is to be done. Remember that lime and the phosphates must be supplied, for it is above all these that old soils grow poor in. It would not do to put them in with the fresh manure, since they would not agree well together, but would go to decomposing one another, instead of making a succession of good dinners for "feeders"—that is to say, the little fibers of roots.

But next spring, as early as the soil is dry, you must apply to each large tree, manured in the fall, two bushels of ashes and a peck of plaster of gypsum, and, if it be a pear tree, a half a bushel of bone dust. If it is an apple, you may substitute a peck of air-slacked lime for the plaster. Spread this evenly over the soil that was dug and manured last autumn, and mix it through the whole with a stout three-pronged fork. This will bring the soil to a good condition again; and the old tree will speedily commence making new roots, setting new fruit buds, and, the next season, begin to bear fine fruit again. And this I do not give from theory, but from actual trial, under the most unfavorable circumstances.

I do not tell you to prune your trees, because I very much doubt the wisdom of it the first year. I would only see that the bark is clean and smooth; and give it a little more soft soap, if necessary, in that quarter. After the tree has begun to exhibit signs of feeling the fall pay you have given it—say twenty months hence—then you may, if needful, prune it moderately. When, indeed, the tree is partly decayed, or full, or broken, or full of tangled and cross limbs, I would be a little severe with it at first, but not otherwise.

This is the season when a shrewd old digger should go over his peach and plum trees, scrape away the earth about the bottom of the trunks, and look for that little rascal, the peach worm. If he is there, expecting that "there is a good time coming," now that he is in such comfortable winter quarters, you will know it by the gum, by which the tree always shows to its natural protector the presence of its enemy. Wherever you see this gum, take your knife, open the bark, and take out the vile grub. If he stays there a few months longer, he will completely circumnavigate the trunk; and, after he has been round the world in this manner, there are no more peaches for you. It is a matter of five minutes to a tree; and if you grudge that pains, for rare grapes, the grub will take five months at it, and get the better of you.

If you are planting fruit trees, don't be so foolish as to set "tender trees," such as apricots, nectarines, and so forth, in warm, sunny places, on the south side of walls, fences and gardens. Such are, depend on it, the very spots to kill them—between the extra heat of mid-summer, and the constant freezing and thawing of the trunk in winter. You had better choose a west, or, if not too far northward, even a due northern exposure. This latter is much the best in the middle States.

Never plant a tree with small roots and large top—when the roots have been made small by the spade in digging—without making the latter small also. There must become ballast in the hold to carry so much sail on the mast, as an old salt would say; and you will gain in the health and size of the tree, three years hence, by shortening back the ends of the longest limbs till you have struck a fair balance between the part that collects food and the part that consumes it.

A Tobacco Tree.—Among other freaks of Nature in this strange climate of California, she has changed the tobacco plant into a tobacco tree. An instance exists, it is said, in this city, where a plant has increased in size until it has become more tree than plant.—[Alta California.]

CULTURE OF INDIAN CORN.

At one of the evening discussions at the New York State Fair, held at Elmira, Chemung county, the culture of Indian corn was under consideration, and the following is a report of the remarks made by the several speakers on that occasion, taken from the *Genesee Farmer*:

The Hon. T. C. Peters, of Genesee county, presided. Speakers were limited to ten minutes.

Mr. Brainard, of Attica, N. Y., planted corn on an inverted sod. Spreads the manure on the sod and plows it in. Does not "hill" the corn. Thinks corn fodder valuable. Cuts up the corn at the roots. In a good season this gives most corn. In a poor season there is not so much gain as compared with topping. Never knew the full value of cornstalks till last winter, when fodder was so scarce. He chaffed his stalks and straw—two-thirds stalks and one-third straw. His horses did well on it. Horses fed on corn leaves never had the heaves.

T. C. Peters said chaffed stalks were good for horses. He did not believe in deep plowing for corn. He would like to hear from others on this point.

S. Walrath, Canton, St. Lawrence county, thought corn a more profitable crop than hay, which was the principal crop in his county. Planted his corn on greensward, 3 1/2 feet apart each way. Hen manure excellent for corn. Had raised 80 bushels per acre. He planted the small eight-rowed and King Philip varieties. Cultivates by using the horse-hoe both ways. Does not hill.

Mr. Brockland, of Dutchess county, tried an experiment two years ago. He drew out 12 loads of manure per acre on a one year old clover sod. He then threw the land up into ridges four feet apart, and, as we understood, then cross-plowed so as to form hills four feet apart, with the manure in the centre. He had 71 bushels on an acre, and the whole field of ten acres averaged 62 bushels per acre. He planted the eight-rowed Canada corn. Put a handful of plaster and ashes in each hill. Thought this method of culture would give large crops—but it was too much labor for general adoption.

John S. Pettibone, of Manchester, Vt., thought the value of cornstalks for fodder depended on the number of "nubbins" the boys left in at husking! Would not top corn if he had grass enough. If grass was scarce would cut up the corn. Corn that is topped makes good fodder. The stalks, when topped, of a crop of corn that would yield 40 bushels per acre, are equal in value to a ton and a half of hay. When corn land is left bare in winter the strong winds blow off the fine soil, and on the side hills much of the richest portion of the soil is washed away. By topping the corn and leaving the butts standing on the land, this blowing and leaching is prevented. If he had regard simply to the amount of fodder he could get, he would cut up the corn at the roots; if he had regard to the soil, he would top the corn.

S. Walrath thought cutting up gave more fodder, and thus enabled you to keep more stock, and to make more manure, and enrich the land. The increase of manure thus obtained would more than compensate for the injury done by blowing and washing.

Gen. Marshall, of Wheeler, Steuben county, thought farmers made a great mistake in being in such a hurry at planting time. They thought every year they would do better next time, but when the time came they were in just as great a hurry as ever. It does not pay to let boys do the planting. It would be more profitable to pay a man that would do the work properly, \$5 a day. His soil was a gravelly loam. He drew out coarse manure on clover sod, and then turns it in as deep as he can and do the work well. Then rolls if necessary, and harrows till the ground is in good condition. Plants four feet apart each way. He smears the seed with soft soap heated in a kettle and then dries it till planted. The soap softens the seed and causes it to germinate more readily, while tar retards germination. He hoped farmers would try soft soap—and we hope so too. The idea strikes us favorably. Had used hen manure mixed with unleached ashes, half and half, a handful in each hill, with good effect. On the right kind of land corn is the most profitable crop a farmer can raise. Feeds the stalks to his cows. In reply to a question, he said he never fed stalks to sheep. Gives his sheep straw, with a little grain.

Mr. Plumb, of Onondaga county, prefers a clover lay of two years old. Plows under twenty loads of manure per acre. Does not plow more than six inches deep. Harrows and then puts on a two-horse cultivator. Plants three feet apart each way. Uses a horse-hoe freely, but does not hand-hoe, at least but very little. Uses ashes and plaster. Expense of cultivation from \$8 to \$10 per acre. Does not like much hill. Will not pay to hand-hoe much. Has raised from 180 to 185 bushels of ears per acre. Thinks corn more profitable than any other crop he raises. Does not top his corn; cuts it up by the roots. Thinks the fodder very valuable. Last year, on the stalks from ten acres of corn, he kept 150 sheep and twelve cows to the 1st of March. They had access to a straw stack. Raises the large eight-rowed yellow corn—ears from eight to twelve inches long. In reply to a question, he said he had raised the white variety but liked the yellow better. Does not like the Dutton.

T. C. Peters spread the manure out on sod

land in the fall, and plowed it under in the spring four inches deep. He had tried planting three feet apart each way and three and a half one way and three feet the other. The thick planting gave most fodder, but less in proportion to the stalks. He chaffs his fodder. Has tried an experiment to determine the relative value of cornstalks and timothy hay. Both were chaffed and steamed. The cows having the cornstalks gave the most milk. The great secret of success in corn culture is to have the ground made very fine before planting. Never hills his corn. Never hand-hoes, except to kill Canada thistles. In reply to a question, he said he would not save his manure from the spring crops for the sake of applying it in the fall, but would use all he had on hand in the fall. He liked to make all the manure he could during the summer.

Solon Robinson, of the New York Tribune, was called out, and said he had purchased what was called a "worn-out" farm in Westchester county, because he was tired of living on the pavements of New York. Some of the land had not been plowed for thirty years. He put in the plow as deep as he could get it for the stones, and then followed with the subsoil plow. He drilled in the corn, in drills three feet apart, and dropped the seed ten inches apart in the drills. He planted the Improved King Philip variety, which was the best he had ever seen in the State of New York. The season was very dry, and the corn did not do much at first, but he had a splendid crop after all. He cut it up (this year) the middle of September. He would cut up as soon as the best ears are well glazed. The fodder from his crop of corn was worth more per acre than the best crop of hay per acre in his neighborhood. If cut rather green and well cured, and afterwards chaffed, he thought cornstalks as good as the best timothy hay for horses and cattle. A gentleman at Springfield, Mass., had informed him that he had proved by actual experiment, that nine pounds of cornstalks chaffed and steamed were equal to twenty-five pounds fed in the usual way.

The Hon. A. B. Dickinson, of Steuben county, was loudly called for. He thought climate had as much to do with the culture of corn as soil. The soils of England are as good as in this country, but they could not grow corn. The climate was not hot enough. This very valley in which we are now, is one of the best corn growing regions in the country. It requires more labor to grow corn here than in Scotia or the Miami valleys, but he had never seen as heavy crops there as here and in Western New York. He had bought thousands of acres of corn in the Western States, but never saw a crop of 60 bushels per acre that weighed 60 lbs. per bushels. Has seen a crop here of 120 bushels per acre. In regard to deep or shallow plowing, he would plow just as deep, and no deeper than the best soil went. If the land had been plowed deep before, and was rich to that depth, he would plow that depth, but he would not turn up raw, poor soil for corn. In plowing be careful to cover all grass and weeds. The distance of planting depended on the richness of the soil, and on the variety. Here the object should be to plant a variety in drills three feet apart, and 20 inches apart in the drills, leaving three plants in a hill. In regard to hoeing; the soil here is apt to crust over, and he liked to break this crust nearer the hill than could be done by the horse-hoe. At the west the corn shot up rapidly, and hand-hoeing was unnecessary. He thought good stalks was better than poor hay, but that there is as much virtue in an acre of cornstalks as in an acre of hay is ridiculous. Hay will fatten cattle, stalks will not.

Sowing Peas in the Autumn.—Cobbett, in his *American Gardener*, recommends sowing early peas in the fall, and mentions the following facts:

"Upon a spot, where I saved peas for seed last year, some that was left in a lock of halm, at the harvesting, and that lay on the dry ground till the land was plowed late in November, came up, in the spring, the moment the frost was out of the ground, and they were in bloom full fifteen days earlier than those sown in the same field as early as possible in the spring."

Prolific.—The San Jose Telegraph says: In the reading room attached to our office hangs a sprig from a three year old apple tree, grown on the farm of A. Vestal, of San Jose. The twig bears thirteen large Bell-flower apples, weighing nine pounds. There are about three hundred pounds of apples yet on the tree, the weight of which would strip every limb from the trunk if the props under them should be removed. The tree itself is a mere shrub, and so covered with fruit that scarcely any part of it can be seen. The surface is one compact mass of fruit."

Castor Oil is said to be better to use on leather than any animal oil, since it has less tendency to harden or thicken the leather, and it has less affinity for water, or is soaked out less by it than any other oil whatever. If bought by the gallon it is not expensive, and has been sold as low as fifty cents.

Large Apples.—Mr. H. Wetherwax, of Sand-lake, recently packed 2,250 apples (pound sweets,) which, large and small, filled nine barrels, thus averaging 250 to the barrel. Of the largest of these apples, 170 filled a barrel.