

gravel walk is the sort of soil to suit it if in an elevated position and fully exposed to the sun. *S. glaberrima* is well known, and a great favorite in the cottage gardens. *S. hirtum*, *S. montanum*, and *S. californicum* are much alike in habit, of medium growth, and all well adapted to form great carpet-like masses in the flower-garden, or to be used as edgings auxiliary to the bedding system. *S. pumilum* is a very pretty little species, very susceptible of damp, and therefore requiring to be made secure against the accumulation of stagnant wet anywhere near it in winter time.—*Hibberd's Gardener's Magazine*.

The Barberry Hedge.

ONE of the wants of the agricultural community at the present time, is a good hedge-plant; one that is reliable under all circumstances and conditions. Nearly every one that has been tried thus far, has exhibited some radical defect, that unfits it for the purpose.

A hedge-plant to become popular, must be perfectly hardy, and easy to propagate. It should also be vigorous enough to grow well in ordinary soils without manure. It should be thorny, to keep cattle from hooking it, and strong enough to keep them from breaking through it. Finally, it should be low enough to require little or no pruning.

The common barberry, (*Berberis vulgaris*) combines these qualities better than any plant that I am acquainted with. The barberry is a native of the northern part of Europe and Asia; but has become thoroughly naturalized, and is now found growing wild in the waste grounds of New England. It is a remarkably hardy plant, thriving well in a great variety of soils, and is said to live for centuries. It has a shrubby habit (growing from six to ten feet in height,) yellowish, thorny wood, leaves in rosettes, yellow flowers on drooping racemes, and scarlet oblong berries, very acid, but making delicious preserves.

We have a barberry-hedge on our grounds at Wallingford, Ct., 25 rods long, and 9 years old, from the seed. Two rows of plants were set, the rows one foot apart, and the plants one foot apart in the row, and set alternately, to break joints. This hedge has been clipped a little, two or three times, to keep it even, and is now six or seven feet high, with a firm, compact base, perfectly impervious to the smaller animals, and stout enough to turn ordinary farm stock, except for a short distance at one end where the soil is quite thin.

On our grounds at Oneida, we have a barberry hedge 50 rods long, and seven years old, from the seed. In this case, but one row was planted, and the plants were set one foot apart. It has been kept clean with the cultivator, and clipped a little, once or twice, and is now five feet high, thick and compact at the base, and already so strong that the fence was taken away last fall, leaving in its place only a slight railing of a single board, six or eight inches wide, as a temporary guard until the hedge can gain another year's growth, it being situated on a highway where cattle are passing daily. An important item in regard to this plant is, its habit of sending up suckers from the bottom, by which, in a few years, it comes to have a base from six to twelve inches in diameter.—*Wallingford Circular*.

The Fruit Garden.

If large fruit is wanted, thinning assists. Strawberries are increased in size by watering in a dry time. Fruit should be allowed to bear only according to their strength. If a transplanted tree grows freely it may bear a few fruits—but bear in mind growth and great fruitfulness are antagonistic processes.

Handsome forms are as desirable in fruit as in ornamental trees. No winter pruning will do this exclusively. It may furnish the skeleton—but it is summer pinching which clothes the bones with beauty. A strong shoot soon draws all its nutriment to itself. Never allow one shoot to grow that wants to be bigger than others. Equality must be insisted upon. Pinch out always as soon as they appear, such as would push too strongly ahead, and keep doing so till the new buds seem no stronger than the others. Thus the food gets equally distributed.

Whether strawberries should have runners cut off depends much on kind and soil. Free growing kinds may grow too freely often in rich soils. Allow them to exhaust themselves and the soil by growing thick together is an advantage. Shyer growing kinds would do no good under such treatment. Most garden soils are rich; but on the whole the most profitable and best plan is the cutting runners off system.

If there be any blackberry really earlier than the Dorchester, it will be well for those who love this fruit to look out in time, and satisfy themselves. They will be in bloom about the end of the month in very early places.—*Gardeners' Monthly*.

BLACK WARTS ON PLUM TREES—A REMEDY.—It is now 30 years since I set out plum trees in my garden, when they began to blossom black warts began to grow, and in three or four years all were dead. After that I procured ten trees of a nurseryman and set them, and when they began to bear, black warts made their appearance. Having seen an account in the Cultivator, that iron turnings, if applied to the ground round the tree, would stop their growth, I tried them. I procured a quantity from a machine shop, applied about a quart to a tree, hoeing it all round, two feet from the tree; at the same time, (it was spring) I removed the black wart; I did not see any more, except two or three which I supposed escaped my notice at the time of the application, for more than 12 years. The trees after bearing first-rate, have mostly gone to decay, three only remaining. This last autumn I discovered a few warts on one of the remaining trees. The account above alluded to said, if a few nails were driven in the ground would answer the same purpose. D. Fisher, in *Boston Cultivator*.

HOW TO GROW A PEAR ORCHARD.—There is but one way to grow up a good pear orchard. The best of land and the best of cultivation is necessary to success. If it is not a deep, rich loam, or clay and loam, free from subsoil or cold water, it must be made so, or the enterprise will prove a failure. Dwarfs should be budded low on the quince stock, to avoid setting too deep. The roots of the trees require the sun and dews as much as those of corn, without which the trees will grow to suckers, ill-shaped and irregular—the fruit insipid and variable, instead of sweet and delicious, and lead you to wonder why your trees so winter-killed; and this arises from the fact that late in autumn, when the sun has penetrated to the subsoil under the roots, a rapid flow of immature sap is forced into the tree, at a time when the sun has passed too far south to elaborate the sap into woody fibre or leafy tissue. The frosts of winter disengage the mechanical organism of the particles, and the first warm, sunny days of spring set it in motion to the detriment or destruction of the tree.

Miscellaneous.

Latin and Labor.

JOHN ADAMS, the second President of the United States, used to relate the following anecdote:

"When I was a boy, I had to study the Latin grammar, but it was dull, and I hated it. My father was anxious to send me to college, and therefore I studied the grammar, till I could bear it no longer, and going to my father I told him I did not like to study, and asked for some other employment. It was opposing his wishes, and he was quick in his answer. Well, John, if Latin grammar does not suit you, you may try ditching; perhaps that will, my meadow yonder needs a ditch, and you may put by Latin and try that."

"This seemed a delightful change, and to the meadow I went. But I soon found ditching harder than Latin, and the first forenoon was the longest I ever experienced. That day I ate the bread of labour, and glad was I when night came on. That night I made some comparison between Latin Grammar and ditching, but said not a word about it. I dug next forenoon, and wanted to return to Latin at dinner; but it was humiliating, and I could not do it. At night, too conquered pride; and though it was one of the severest trials I ever had in my life, I told my father that if he chose I would go back to Latin grammar. He was glad of it; and if I have since gained any distinction, it has been owing to the two days labour in that abominable ditch."

Boys may learn several important lessons from this story. It shows how little they oftentimes appreciate their privileges. Those who are kept at study frequently think it a hardship needlessly imposed on them. But they must do something; and if set to ditching, would they like that any better? The opportunity of pursuing a liberal course of study is what few enjoy; and they are ungrateful who drag themselves to it as an intolerable task. You may also learn from this anecdote how much better your parents are qualified to judge of these things than yourselves. If John Adams had continued his ditching instead of his Latin, his name would not probably have been known to us. But, in following the path marked out by his judicious parent, he rose to the highest honors which the country affords.—*Rural New Yorker*.

TIMBER MEASUREMENT.—The dimensions of round timber are found by girthing the log, and taking one quarter of the girth for the side of the square. Hence the rule. Multiply the square of one-quarter of the circumference by the length of the timber, and you have the contents of the log or tree.

HOW TO DESTROY RATS.—The appended method is said to be an excellent means of destroying rats in a house:—Oil of amber and ox-gall mixed in equal parts, added to thin oat meal and flour sufficient to form a thin paste; divide into little balls, and lay in the middle of the apartment infested. These balls will form an irresistibly attractive bait for the rats, who ravenously eat them, but will immediately be seized with intense thirst. Several vessels of water must be laid close by, at which the rats will drink till they die on the spot.—*Builder*.

FACTS WORTH REMEMBERING.—"Cosmo," in the Philadelphia Saturday Evening Post, gives the following facts worth remembering.

It is worth while, for all farmers everywhere, to remember that thorough culture is better than three mortgages on their farm.

That an offensive war against weeds, is five times less expensive than a defensive one.

That good fences always pay better than lawsuits with neighbours.

That hay is a great deal cheaper made in the summer, than purchased in the winter.

That a horse who lays his ears back and looks lightning when any one approaches him, is vicious. Don't buy him.

That scrimping the feed of fattening hogs, is a waste of grain.

That over-fed fow's won't lay eggs.

That educating children is money lent at a hundred per cent.

That one evening spent at home in study, is more profitable than ten lounging about country taverns.

That cows should always be milked regularly and clean.

That it is the duty of every man to take some good, reliable, entertaining paper, and pay for it promptly of course.

SPONGES.—It may surprise the reader to be informed that the quantity of sand he finds in a new sponge has not been inclosed there, by the animal or vegetable during its growth, but is an adulteration practised by the agents and merchants who purchase the sponge from the dealers, in order to increase its weight and their profit. I have seen, in the islands of Symi, Calymo, and Khalki, as well as elsewhere, the recently arrived cargoes of several sponge-boats undergoing the process of adulteration before packing. The sand having been imported from some spot known to yield it of the fineness requisite for the purpose, is mixed with water, in which there is a little gelatine or gum to enable the sponges to take up and retain it the better, and without being detected afterwards; the sponges are then well kneaded into it, so as to fill up their minute pores; they are then dried in the sun, and packed very closely together in goat's hair sacks, of an open texture, the sand, as it becomes detached from the sponges by the motion of their transit, may escape. In this way a hundredweight of sponges in their dry state will be so sanded as to weigh more than a ton before they are packed for exportation to Europe.—*Travels and Researches in Crete*.

Poetry.

Progress.

STRADLE, steadily, step by step,
Up the ventu'ous bullers go;
Careful pacing stone on stone,
Thus the loftest temples grow.

Patiently, patiently, day by day,
The artist toils at his task away;
Touching it here and tuning it there,
Giving it ever with infinite care,
A hue more soft, or a hue more fair;
Till little by little the picture grows,
And at last the cold canvas glows
With life and beauty and forms of grace,
That ever more in the world have place.

Thus—with the poet—four after four
He list'ns to catch the fairy chime
That rings in his soul; though with magic power
He weaves their melody into rhymes,
Slowly, carefully, word by word,
Line by line, and thought by thought,
He tastes the golden tissue of Song
As it flows are immortal anthems wrought.

Every well-observer knows,
Every watchful gazer sees,
Noble grandeur, beautiful grace,
Scarcely a trial of his degree;
A subtle, but a purpose high,
And fondly the proud result await,
Whence not, as it, hours go by,
That the season is long, the harvest late,
Remember the old orchard, spring and tree,
Mind, and artist, and hands sublime,
Who I led to the past and traced it to you,
Worked an hour, and a weary sometime,
Dark, and cheerless and to their minds,
Yet they patiently at their task begin,
Till lo! thro' the clouds broke the morning light,
Which shines on the soul when success is won!