

The Yellows in the Peach.

This disease is making great ravages in some of the first fruit-growing regions of the States, nor is it wholly unknown here. Its origin and any effectual remedy have so far baffled the skill of horticulturists. The loss from this one disease has been great. Endeavors are made to stamp it out by legislative enactments. In the region bordering on the lake shore, this pestilential disease has been a great destroyer of valuable property.

The following item we abridge from Colman's *Rural World*:

The subject of regulating the yellow in the peach by-law, and making the attempt to quarantine it, is one that deserves the hearty support of all fruit growers. This disease in the peach has been found by observation to be contagious, and like the potato disease, very difficult to overcome where it has once got a foothold, from the variety and the insidiousness of its methods of propagation. It can hardly be said yet what it is—whether a development of fungoid origin, or a disease which is organic, and is so interfused into flower and fruit, leaf, branch, stem and root, that it seems almost impossible to overcome its destructive energy, without extermination wherever it has appeared. Even a tree that may seem to be cured, it is observed, may produce pits and seed that will transmit the disease to the nursery produce, where they are used to raise seedlings. This at least seems to be the conclusions which the most observant of peach growers have come to after having given the disease itself much attention. The South Haven Pomological Society have had a special law passed to provide for the prevention of this dread peach disease being spread outside of the orchards and localities where it has been developed, but it has not been found in practice as well adapted to the work as it was hoped it would prove. The task of changing this law, and rendering it more effective, was lately committed to a joint committee of South Haven, Saugatuck and Ganges Pomological Societies, and the chairman, T. T. Lyon, at the late meeting of the South Haven Pomological Society, reported the amendments which were supposed to be necessary. There is little doubt that without a very general action under any law which may be passed, the peach yellows will be fully as difficult to eradicate as the Canada thistle; but still the thoughtful and sagacious fruit growers who see the necessity of legislative support in their efforts to promote and develop a profitable industry in the State, and in a locality adapted to such purpose by soil, climate and skill of the people, should be heartily seconded by the press and the public, and by such legislation as may be required, and that may be found in agreement with the provisions of the constitution.

Asparagus and Rhubarb.

W. T. Philbrick, writing in the *American Cultivator*, says: After the frost has killed the leaves of the rhubarb and the stems of asparagus, it is a good plan to clean up the bed and give it a good dressing of manure. To be sure, this can be done in the spring, but the spring is usually a very busy season in the garden, and time as well as manure is more in demand then for other things. Moreover, the manure applied now becomes thoroughly incorporated with the soil by the winter rains, and is all ready for the early stalks of these vegetables in the spring.

The method I generally follow is to clear off the stems and other rubbish from the bed and then run a small plow on each side the rows lightly, so as to disturb the roots as little as may be; the manure, which may be rather coarse, is then spread along the furrows and covered by turning the loam back with the plow. A liberal dressing of ten cords or more per acre is needed by these vegetables to insure a good crop. If it is desired to plant a new bed of rhubarb, it may be done in the fall, though the spring is preferable.

The rows are usually made three and a half feet apart, and a good dressing of manure applied in the furrow. The old roots are cut up so as to have one or two eyes to each piece or set, and these are planted about three feet apart in the rows. A few may be expected to fail, and will need replanting in May, when the missing places can be seen. If planted in spring it is a little less likely to miss growing evenly. The Victoria rhubarb is the kind generally used for market, and is probably the best kind. Asparagus is always planted in spring.

Utilizing the White Thorn.

From a report on forestry planting received from Cherokee County, we extract the following:—

"In 1875, I think, I attended a meeting of the State Horticultural Society held in Des Moines, and listened to the discussion on growing the pear on thorn roots. I gave it little attention at the time, but since I have seen a tree in Carroll County, Ill., top-worked on a seedling thorn coming up in a garden, loaded with luscious pears. The same fall I gathered a bushel of thorn apples and planted in my garden, hoping to get some seedlings to graft the pear on and also to try for hedge. But not a solitary plant has yet appeared. How do you raise the seedlings? Is it best to graft or bud the thorn? I have one plant alive out of several I took up on the creek bottom and planted."

This is a more important list of questions than, at first thought, would be apparent. In this State, as well as in Wisconsin, Illinois and Indiana, we have many vigorous pear trees, bearing beautiful crops which are worked on thorn stocks. In some cases the trees were crown-grafted on small plants; but the majority of the successful trees have been top-grafted entirely above the ground. In all cases, however, when the stock has united perfectly with the graft and kept very nearly even pace in growth, the stock has been a thrifty seedling, springing up where grafted, or else the seedling thorns have been grafted or budded in nursery and transplanted when of small size. All attempts at grafting or budding trees transplanted from the forest, have resulted in imperfect uniting of graft, and feeble growth. Practical tree-growers would expect precisely this result.

Thorn apples planted whole in garden soil will never germinate the first season, and rarely will one appear the second or third year. If the apples be mashed, mixed with meal, and fed to cattle or sheep, and the droppings be planted, about every seed will germinate as readily as corn. Four or five years since, the writer had a wagon load of thorn apples gathered by shaking down on canvass. They were run through the mill for pulping cider apples, and the seeds washed from the pomace and kept over one night in a warm solution of sulphuric acid. As to the limit of strength of solution which the hard-shelled seed will bear, we are not yet advised. One quart of the acid in twelve gallons of water, seemed to soften the seed covering, with destruction of very few of the seeds. After the soaking, the seeds were mixed with sand in boxes and placed in cellar until cold weather, when they were put out on the north side of a fence to freeze and thaw as it happened. Planted early in the spring, nearly all grew. Plant several seeds at every point where a pear tree is wanted. If several grow, save the most vigorous specimen. Top-graft the second or third year, not more than three feet above the ground. Graft very early in spring, making diagonal cut to receive scion precisely as successful fruit-growers graft the cherry and plum.

In starting a hedge, we also advise putting out the thorn seeds where wanted, sowing thickly, thinning as found necessary at end of first season's growth. The thorn is much checked in growth and lowered in vitality by transplanting at any age. For pear stocks, the free-growing thorns of our river and creek bottoms—with sharply serrate leaves and edible fruit—should be selected. For hedging, the species growing in our prairie groves, with crenate leaves and small, acid fruit, is preferable. The season for gathering the fruit and preparing the seed will soon approach.—*College Quarterly*.

THE CHINESE PRIMROSE.—When it was first introduced, nearly sixty years ago, its flowers were not larger than a five-cent piece, and now we have flowers larger than a trade dollar, with the edge elegantly fringed and in color varying from pure white to the most brilliant crimson. No matter whether it is seen in the conservatories of the wealthy or the windows of the poor, it is always a source of pleasure, being in the winter what the Geranium is in summer time—everybody's plant. There is no plant so grateful for a little extra attention as the Chinese Primrose. Being a plant with fine roots, it must have a light soil. I find a good mixture for them to grow in is half leaf mold or soil from the woods, and the other half rich sandy loam. Let the soil be rich, light and porous.

Pasturing Orchards.

In England almost every orchard lies in permanent grass, and those that are annually grazed with sheep or only some calves lying with them—and the animals well fed in the winter—will give more fruit and cause the trees to prosper better than if cultivated with the plow. The droppings and urine from the live stock, when an orchard is grazed, mature the trees quite as well as the application of manure by hauling it thereto. There is much less pruning in the farmers' orchard of apple trees, and they last longer, which is partly attributable to the climate, as the wood grows slower; but the cutting away of so much wood increases the growth of numerous shoots, and renders constant thinning a necessity. When an orchard is grazed, the stock naturally lie in the shade during hot weather, and of course the trees benefit from the constant evacuations, being thicker where the roots gain nourishment.

I have the present summer some yearling heifers lying in the orchard, and they have done most extraordinarily well; for, although the pasture is very bare, many people suppose that meal or other food is given in addition to the grass; at the same time the apples compare favorably with another orchard not grazed, and are better than in a third one which has been mowed.

Although an experience of over twenty years in England proves grazing decidedly preferable, yet nearly the same length of observation on this continent has failed to allow of writing confidently, because there have not been opportunities for proving the good effects of continued grazing, as the American farmers are so given to use the plow on old grass to what the English farmers are. It would be well for farmers to state their experience in this respect for crops of any kind; besides, grass is apt to fail in returning much for growing in the shade, and the work of cultivation and harvesting is greater.

A Hardy Single Rose (*Rosa rugosa*).

This is a most beautiful and striking rose, albeit it would find little favor at the hands of the National Rose Society. Says the *Gardener's Chronicle*:

It is a Japanese shrub of moderate size, 3-4 feet in height, the branches very densely beset with straight prickles of unequal size, the leaflets elliptical, obtuse, serrate, deep green, and rugose above, villous beneath. The flowers are solitary, 3-4 inches in diameter, rose-colored or pure white. The sepals are lanceolate acuminate, sometimes slightly dilated at the tip. When the flower has fallen the fruit ripens into sub-globose, berry-like haws, which are glabrous or with a few short bristles, and of a lovely coral-red color. Out of flower this rose is effective and striking, with its bristly stems and bold rugose foliage; in flower few roses surpass it for beauty and continuity of bloom. In fruit it has scarcely a rival in its large glossy berries, if we may so call them familiarly. In Japan we are told it grows wild in sandy places by the coast, and we are further told that it has been cultivated in China as well as Japan from time immemorial, and that numerous varieties occur as to color, but no double one, on which account our rosarians, we fear, would have but a poor opinion of its merits. Our specimen was procured from Mr. Ware's nursery at Tottenham. On his rockery this rose in its red and white varieties has been in flower all the summer, while at the present time the fruits are exceedingly striking. We believe this rose to be so perfectly hardy that even the timid ones who dread—and not altogether unreasonably—the effects of the next severe winter, may plant it and sleep in peace.

Pruning Grapevines.

Strong-growing vines in strong soil must have room to extend in order to fruit properly. If the crop sets too full it should be thinned. If vines which are making a rank growth are trimmed too close, they fruit insufficiently, and make a surplus growth of spongy wood. When the vines get some age, having fruited five or six years, they make less growth, and should then be gradually cut back, so as to get canes sufficiently strong for fruiting purposes. During a succession of dry seasons, especially if largely fruited at the same time, the vines at pruning season must be thoroughly shortened in. Of course the folly of exclusive systems of short or long pruning is obvious. If the vineyard is on stiff clay, it is quite safe to prune even Concord short, but if it is on a rich black soil, or a deep sandy loam, strong-growing sorts must have length of vine to be healthy and bear properly.