

About Grafting.

The cause of most failures in getting grafts to grow is not in the setting, but in the time of cutting and subsequent care of the scions. The selection of those should never be made later than February to ensure certainty of growth. My way of preserving them is to cut them on a day when the ground is thawed, at least on the surface, and after tying them in bunches with the butts even, and labelling them as I would fruit trees, stick the cut ends into the soft earth on the north side of some building or wall, where they will be always in the shade. If prepared thus and properly set, ninety-five per centum of apples should grow. Pears are rather more uncertain—stone fruit much more so. I find the greatest difficulty in getting cherry grafts to succeed on small stocks, owing to the tendency of the wood to spring apart; on stocks of from one to one and a half to three inches there is little difficulty. These small stems of cherry, peach and plum are better budded. Budding is a more simple and expeditious method yet than grafting, but requires a later season. Grafting-wax or salve for covering the wounds is made mostly of resin, bees-wax and tallow, in the proportion of three, two and one parts in the order named. Linseed-oil, substituted for the tallow, in a rather small proportion, is an improvement, as the object is to get a pliable substance, with as little grease as possible. I have set many hundred grafts for myself and my neighbors, and my only failures, in about the proportion above named, were when the scions had been badly preserved. Some which I have been asked to set were just about in the proper condition for kindling wood.

Insects Injurious to Fruit-trees.

The insects most troublesome to fruit-trees are the green and black small soft ones that appear suddenly in immense quantities on the young shoots of the trees, which suck their juices and thereby arrest their growth. They multiply with wonderful rapidity. It is estimated that one individual may be in five generations the progenitor of six thousand million. There are many ways of accomplishing their destruction. P. Barry, the well-known pomologist of Rochester, N. Y., prepares a barrel of tobacco-juice by steeping stems for several days until the juice is dark-brown, like strong beer; this he mixes with soap-suds. A vessel is filled with this, and the ends of the shoots where the insects are assembled are brought down and dipped into the liquid. One dip is enough. Such parts of the tree as cannot be dipped are sprinkled with the liquid. It can be applied to the head of large trees by means of a hand or garden syringe. Both dipping and sprinkling are best done in the evening. Repeat the operation as often as the plant-lice make their appearance. The dry weather of midsummer is generally the most favorable time for them. If the liquid is too strong it will injure the foliage; therefore it is well, in using it for the first time, to test it on one or two small branches before applying it extensively.

THE WILLOW AS A PREVENTIVE OF MALARIA.—Mr. Von Lennep, Swedish consul, writes from "Mahazik, near Smyrna," to the London Times as follows: "Before the eucalyptus was ever heard of in Asia Minor, I had seen the bark of the willow used as a febrifuge. I had remarked the easy and inexpensive reproduction of this tree, its quick growth in damp places, its excellent qualities for fuel and for agricultural implements, and its great advantage for strengthening the banks of capricious streams, and had thence taken every opportunity after the winter floods to stick willow cuttings along the banks of streams and other damp places in my property; also to scatter the plane tree seeds in marshy spots. The result has been that, whereas twenty years ago the full grown trees in this neighborhood might have been counted, a luxurious growth of willows and plane trees marks my place, fuel is abundant, fever is steadily decreasing, the meandering propensities of the streams are checked, my neighbors have come to me for agricultural implements, and I have not far to go for timber for rough purposes."

J. C., Delaware, who was a large and successful peach grower, found lime the best manure he ever applied to peach trees. He scraped the dirt off and applied from three to a dozen shovelfuls of lime fresh from the kiln to the naked roots. It killed the grubs and favored the growth of fruit.

Do Bees Injure Fruit?

At a meeting of bee-keepers, of Missouri, held at Kansas City on the 5th ult., Mr. Slocum stated that his last crop of peaches and grapes was nearly destroyed by bees. This information was drawn out in the discussion, "Do bees injure fruit?" After looking at this matter from all points, and hearing the experience of prominent horticulturists, we have come to the conclusion that the gentleman is in error in attributing the destruction of his fruit to the work of bees. After an apple, pear, grape, or any other fruit having a skin protection, is once formed, it is a physical impossibility for a bee to make any impression whatever upon it. If Mr. S. had examined his fruit carefully he would have found that the apples and grapes upon which he noticed bees at work had been previously injured, if not by rot or being bruised, by a far more destructive insect than a bee. The bees were gathering a harvest from holes in the fruit made before their first visit.

We would be pleased to hear from any other bee-keeper or horticulturist on this subject.

Good Points in Peach Culture.

At the annual meeting of the Western New York Horticultural Society, Mr. Youngblood advised cutting back peach trees in the early spring to induce a strong growth of new wood for the next year's fruiting. He also advocated thinning out the fruit. His plan is to thin out when the fruit is about the size of cherries, leaving the peaches five or six inches apart on the limbs. This rigorous thinning, he contended, not only largely increases the size of the fruit, but entirely transforms its character, making it rich, juicy and melting. An equally important result is the greater vigor of the tree. The pulp of the fruit does not exhaust the vitality of the trees nearly so much as the production of a number of half-formed specimens of little value. Thinning peaches he considered a preventive of rot in such varieties as Hale's Early. The thinning should be done before the stone is formed, or the fruit will have drawn largely upon the vitality of the tree. Early varieties as a rule require the most thinning. A few kinds do not need thinning, the Late Crawford, for instance, which generally thins itself sufficiently.

Strange Effect of Girdling Grape-Vines

Among the experiments with the grape-vine at Amherst Agricultural College, girdling has produced some remarkable results, both in the quantity of the fruit and the period of development. The vines were girdled about the first week in August, when the free acid of the Concord grape had reached the highest state, and the grape-sugar had begun to increase. Experiments were made with whole vines and with branches. Two incisions were made through the bark and cambium layers from one-quarter to one-eighth of an inch in width, and the substance between removed. The fruit on the girdled vines matured fully two weeks in advance of the ungirdled vines. Prof. Goessman picked fully-matured fruit from a girdled vine at his residence fully three weeks in advance of fruit on ungirdled branches of the same vine. The vines that were girdled a year ago were in fine condition this season, and although in most instances fully healed over, the girdlings seemed to produce the same effect on the fruit as the first year.—[Amherst (Mass.) Transcript.]

Mr. Jas. Spence, of the village of Garmouth, is the happy owner of what the English *Journal of Forestry* describes at length as "the largest and most prolific pear tree of its kind in Great Britain." Age, more than 100 years; height, 40 feet; circumference of trunk 5 feet; diameter of space underneath the spread, 126 feet. The huge branches are supported by planks running along the top of eleven immense wooden pillars. The fruit—called Golden Knot, or Golden Ball—is not large, but very sweet, and hangs in clusters like grapes, one of which numbered no less than 300. The product in 1876 was 28,600, by actual count, and this year "considerably over 50,000."

A Michigan lady writes that to kill insects she uses one teaspoonful of kerosene to a gallon of water, and sprinkles it on the plants with a hand-broom. It destroys green flies, currant worms and other pests, and was used without injury on fuchsias, geraniums, callas and other plants. Kerosene on corn-cobs hung on plum trees is said to be bad for curculios.

Salsify.

Salsify is often called Oyster-plant. We wish it was not, for many who live far inland do not like oysters, and the name prejudices these persons against one of the greatest delicacies of the garden. It is indeed a choice vegetable, and one within the reach of every one, as it requires no more cultivation than a parsnip. Its requirements are precisely those of the parsnip—a deep, rich soil and early sowing of fresh seed, the seed being quite uncertain if not the growth of the previous season. Make the rows fifteen inches apart and sow as soon as the soil is dry enough to work; the seed being long is not readily sown in a machine, and it is safer to sow by hand. The root is rarely over an inch through; to get the largest ones possible, thin to three or four inches, and keep free of weeds.

Scorzoneria or Black Salsify is a related plant, grown in the same manner and for the same use; the root has a darker exterior. By some the flavor of this is preferred. Both are hardy, and if desired a part of the crop may be left in the ground until spring, the winter's supply being left in the ground like other roots.

Use.—The roots are to be scraped and thrown into water at once, else they turn dark. They are cut into small pieces, stewed, and served with a sauce of butter thickened with flour; they are boiled whole until soft, then dipped into batter and fried, or are mashed after boiling, made into cakes which are dipped in batter and fried. They are also frequently used to make a soup. It is surprising that so excellent a vegetable should be so little known, and we are quite sure that those who try it for the first time will thank us for bringing it to their notice, and will not be without it thereafter.—[American Agriculturist.]

Flowers Around English Homes.

To an American the cosy and flower-encircled homes of the lower classes in England are objects of great interest. No home, outside of the pent-up alleys of cities, is so humble or so poor as not to have sweet flowers in profusion about it. Yesterday I was at a conservatory and watched with wonder the orders given by poor people for the spring plants. Really, it was surprising to see a man, evidently a day laborer, order five shillings' worth of plants to set "about the house." I happened to know that during the winter charity was called upon to help support his family, and yet when the sun came out bright and warm, and he had secured work, the first thought was about the flowers to make a poor home look cheerful. Evidently, no prince or peer derives more pleasure from flowers than does this farm laborer. After all, it is not the wealth that one has that brings happiness and makes life enjoyable, but the "sweet content" that pervades heart and home.—[Am. Paper.]

Gas Tar for Curculio.

It is well known that the curculio have very delicate olfactories. Plums are raised annually by setting the trees close to places emitting offensive odors. Gas tar emits a thick, dense, offensive smoke, and if applied to trees often enough, and at proper times, we have no doubt it will keep away the curculio. The smoking should be begun as soon as the plums can be seen, even before they are as big as peas, for the "little turk" takes time by the forelock. It should be continued twice a week, beginning on the side of the orchard that the wind is blowing upon, working with the wind in all cases, and the smoke will be carried a considerable distance. A rain would wash off all scent of the fumigation, and hence the orchard should be refumigated as soon as the rain is over. If you have ignited charcoal with a skillet over it to heat the tar, but not so hot that it will ignite, it makes the best smoke. We think this will prove a cheaper way of saving plums and peaches than the tarring process.—[Rural World.]

REPOTTING PLANTS.—If the roots become pot-bound of plants that have been blossoming all winter in the house, it will become necessary to repot them in the spring, and the best time to do so will be during the months of April and May. Or, if you wish, you may put them out in the ground, trimming them up, and they will soon sprout again, making nice plants. The branches trimmed off will make good slips and fine blooming fall plants for next autumn.