How to Grow Pears.

The proper cultivation of this universal favorite is more frequently the subject of discussion than that of any other fruit. Successful growers of apples and other fruits so often fail in their attempts to raise pears, that they regard the favorable results of their friends as a mystery—the effects of a dear-bought recipe, to them kept secret. Their extensive cultivation, especially in the Northern States, has seldom been attempted; but those most successful in raising them are most desirous of extending their culture and improving their qualities.

To discuss the merits of the various theories and practices of different cultivators, would require more time and space than we can at present devote to the subject. From the widely different modes of treating this fruit tree, an outline of the course suggested by our own experience and observation will, we feel assured, prove satisfactory in similar circumstances.

It cannot be far from correct that every climate and soil which will grow corn can be made to grow pears. Soils which are of a strong, gravelly texture, with some clay intermixed, appear to be best adapted to produce fruit of the highest excellence. Varieties which flourish on the quince, do exceedingly well in a soil rather moist; but any soil not inclining to be dry, with good culture will produce fine fruit, either on the pear root or quince. It must, however, in either case, be deep and rich, as success can be obtained on no other condition. Whether pears succeed best on the quince or on their own roots, is a question frequently asked. "I do not want any more of your dwarf trees," said a driving farmer, "they get broke down with the snow, and break off where they grafted. They are good for nothing; too short lived. I want something not afraid to hold their heads up; some good large standards, as you call 'em. If they don't bear in my day, my grandchildren will have something to remember me by, and I shall get some credit, if no pears." "If I can have only one style of tree," says our city gardener, "I would sooner take the dwarf. It takes very much less room, and you can have a greater variety, and get pears in a year or two after they are planted. I have gathered two bushels of as handsome Louise Bonne's as were ever seen in market; and the tree had been planted only six years last spring. And I have a dozen more trees in my garden, all dwarfs and planted at the same time, that you could not buy for fifty dollars apiece."

It is not to be wondered that tyros, who come in contact with either of the zealous representatives of these different methods of pear growing, should become at the outset as decided in their preferences as a young politician, who reads one political paper. In this, as in many other theories, truth is found between two extremes. It is as well ascertained that the Duchess does admirably on the quince, as that the Bartlett will flourish best on the pear stock. The Duchess cannot be grown advantageously on the pear; and the Bartlett will not unite well nor flourish on the quince. But we venture an opinion that few lovers of pears would be willing to leave either of these choice old varieties out of their collections.

The first requisite is a rich and mellow soil. If moist, it must be underdrained. We do not mean by richness any such quality of soil as the farmer describes when he speaks of his best corn lands, or grass fields, or even his garden. One of the pear growers in Massachusetts plowed a certain lot ten or twelve times as deeply as possible, and applied thoroughly decomposed compost half as many. The trees had been planted three years, and had made a growth of four to six feet in one season on the leading shoots. This extravagant mode of enriching, succeeded by a like excessive growth, is so unlikely to be imitated, that we need not caution our readers in this direction. our fear is that sufficient nourishment will not be provided to produce satisfactory results.

Next in importance is the selection of the trees; and in no particular is the novice likely to err. The variety, size, form and health of the tree, are points about which he can be informed only by years of observation and experience. Trees slightly crooked are certain to become of sufficient size; but they are often rejected for such as are perfectly symmetrical, but defective in other respects, when examined by the experienced grower. And this demand for perfectly formed trees, as if manufactured to order at some umbrella establishment, has a tendency to induce the growth of certain straight, vigorous-growing sorts by nurserymen, to the exclusion often of better varieties, which are straggling and crooked in their habits,—as the Winter Nelis. Varieties, too, are often selected which it is as unwise to plant as it would be to attempt to grow the fig or the apricot; and the more experience a gardener has in this department, the more caution and care will he exhibit in his recommendation of sorts.

Planting, when the ground is thoroughly prepared, is very quickly and easily performed. The holes for the reception of the tree should be wide and deep enough to receive the roots without bending. Branches that are too luxuriant are checked by simply bending them downward. In like manner, a short curve of the roots from their natural position will prevent growth and weaken the tree. Deep planting is yet more fatal in its effects. Even the dwarf tree on the quince should not be planted as low as is recommended by some writers. It is sufficiently deep if the stock is covered. The greater facility of operating has induced some nurserymen to graft quince at too great a distance from the ground. When planters understand their interest, the practice will be discontinued for want of purchasers, as trees grown in this way seldom produce satisfactorily.

Various ways of staking are adopted to prevent the newly-planted tree from being blown about by the winds, an important item, sufficiently understood. Watering is seldom necessary, and as usually performed is injurious. At the time of planting, it may be applied very soon after the roots are covered, but the final layer of earth should be thrown on dry and light, to prevent evaporation. Every one must have noticed how much sooner and deeper a hard road dries or freezes, than lightly plowed land; and watering the surface very soon hardens the soil, when it resists the action of dews and becomes parched and cracked, thus producing the dryness so important to prevent. It is, however, sometimes necessary to resort to artificial watering, to save the life of the tree, and the more nearly we imitate tte natural showers, the greater will be our success. We have several times saved very valuable trees by sprinkling the top with a garden engine,—the best method we have ever adopted for this purpose. Very good results may be obtained by simply removing the earth nearly to the surface roots and applying a large quantity of water at once, only in as gradual a manner as possible. When a barrel of water has thus been absorbed, the soil may be replaced, and no more water applied for several days or weeks.

Mulching with any substance that will keep the ground moist, is of great importance. Where various materials can be had, preference should be given those of an enriching nature, and the mulching should go on in winter as well as in summer. In young apple orchards, if this were allowed, danger would arise from the depredations of mice, but pear trees are seldom troubled by this vexatious quadruped. Offensive substances are sometimes applied to guard or preserve them. Alkalies and various other substances, at proper times and proportions, benefit the tree also, by producing thrift and preventing insects. But application of coal tar or oily substances should never be made to a growing tree.

At the time of planting, the tree requires more or less pruning and shortening of the branches. You will never need to caution the nurserymen about giving you too many roots. It would be better to ask him to send the roots with the tops, and have them packed in the most approved style, as pennies saved in lifting or packing are as many dollars deducted from our prospective pear orchards. Smothly paring the roots, where they are broken, assists them in healing. All superfluous branches should now be cut out, and usually one-half the growth of the previous season should be cut back. The most upright shoots, however, being the strongest, should be reduced more than one-half, while the lowest side branches should remain nearly their full length. The form of the tree has much to do in the proportion of this reduction.

The dwarf pear tree requires to be pruned in a manner somewhat similar, but its lower branches should be kept within two feet of the ground, and the pyramidal form adopted. All attempts to grow this tree as a tall standard have failed. The leading shoot of two year old trees (the usual age to plant) should be cut back, leaving only six or eight buds at its base, while the side branches should be pruned in less proportion, keeping the pyramid form in view.

Preparing and Preserving Rennet.

In a discussion at the Dairymen's Club in Utica, Mr. H. Lewis of Frankfort said:

How shall we prepare rennet for use in cheese-making? Dip a sufficient quantity of whey from a sweet curd, or one-half gallon from each rennet to be used; heat it up to the boiling point over a slow fire and skim off the albumen that rises to the surface. Set by the whey until cold; then turn the whey off from the albuminous matter at the bottom of the vessel, and to each half-gallon of whey add one rennet and sufficient salt so that there will always be a small quantity of salt undissolved. By rubbing the rennets three or four times each day, for as many days, the liquid will be of sufficient strength for use. Strain this into a jar, to be kept for daily use, always keeping it supplied with salt undissolved. Every time before dipping out for use, stir the liquid thoroughly. The daily stirring will make the rennet of uniform strength, and also aid its keeping. The rennet skins may be salted and again dried, or put into another jar with half the quantity of whey first used; and by soaking and rubbing as before directed, the liquid will, in a few days, be of about equal strength with that obtained at the first soaking, and may be strained into the same jar with it. The skins may now be returned to the jar, and sufficient whey added to cover them; a weight being put on to keep them under, and sufficient salt added to reach above the liquid. The rennets will remain perfectly sweet any length of time, or until the jar may be wanted for a new batch of rennets. Then for each new rennet add a half gallon of whey as before, give the old skins a thorough rubbing and rinsing, after which they may be thrown away. In preparing rennet for use in cheese-making, two precautions are necessary; first, every rennet should be carefully examined, so that no impure nor tainted rennet shall be put into the batch; and secondly, salt undissolved should always be kept in the jar while preparing it for use, and also in the jar from which the daily supply is taken.

Magic Nerve Liniment.

This was used and recommended by Dr. Stewart, for nervous affections, spring-halt, swelled joints, &c., in horses.

Spirits Hartshorn, 1½ oz.
Sulphuric Ether, 1½ oz.
Spirits Turpentine, ½ oz.
Sweet Oil, ¾ oz.
Oil Cloves, ½ oz.
Chloroform, 1 oz.

Put into a strong bottle of the capacity of eight ounces, shake liniment, and it is ready for use. Keep the bottle securely closed, and in a dark place free from light. D. C. H.
Dane, Wis.

Both the Army worm and Chintz bug are reported doing much damage to crops in different sections of Iowa.

The Potato Bug.

On the approach of winter they dig down and bury themselves in the earth six or eight inches deep, where thousands of them may be found in their winter quarters, only waiting for the warm sun of June to call them forth to their work of destruction. The bugs will make their appearance about the first of June, but will not be so numerous but that they can be managed until an early crop can be matured. When they first appear, they immediately fly in search of their favorite food. After a few days the sexes pair, and in a day or two the eggs are deposited, after which the old bugs soon become torpid and die, having gone their round of life, and filled out their little day. In four or five days these eggs in their turn are hatched, and after about ten days of voracious feeding, these things that are hatched attain to the full size of the potato bug larvæ. They then seek the earth and dig about an inch under ground, where in a few days the larvæ changes to the beetle, when they come forth the complete Colorado potato bug, to perpetuate their species in like manner as the first. And thus they keep on multiplying, one generation after another, increasing to such astonishing numbers as to sweep everything before them. On the approach of cold in autumn it seems that those only burrow in the earth that have not yet paired together, while all the rest die off. Paris green will kill them, but they keep coming in such numbers and multiplying so fast, that I think it extremely doubtful whether it will pay to cultivate the late varieties of potatoes at all.

Lime and Salt.

Prof. Johnson recommends for fertilizing purposes, to mix 1 bushel salt and 2 bushels dry lime under cover, and allow the mixture to decompose gradually, thus forming an intimate chemical unison of the two materials. For this purpose the mixture should be at least 6 weeks before use, or, still better, 2 or 3 months, the heap mentioned being turned over occasionally. This salt and lime mixture, when applied at the rate of 20 or 30 bushels per acre, forms an excellent topdressing for many crops. It acts powerfully on the vegetable matter of soils; 56 bushels applied to a turnip field have produced as large a crop as barnyard manure. It is also very destructive to insects and grubs in soil—it attracts moisture from the air, and is useful against drought. Its decomposing power is remarkable, and if 3 or 4 bushels of it are mixed with a cord of swamp muck, the latter would soon be reduced to powder.

Salt and plaster mixed are also said to be a very good top-dressing on some, while on others they do no good. Plaster does well on some soils and is worthless on others. The same is also true of both lime and salt, as it is of most other commercial fertilizers. Let these facts be carefully heeded by farmers and gardeners.

Pickling Cucumbers.

The following receipts from an exchange are seasonable and appear practical:

1st. Take cucumbers, wipe them clean, and lay them in stone jars. Allow one quart of coarse salt to a pail of water; boil the salt and water till the salt is dissolved; turn it boiling hot on the cucumbers; cover them up tight and let them stand for twenty-four hours; turn them into a basket to drain. Boil as much vinegar as will cover the cucumbers wash out the jars and put the cucumbers into them; turn the vinegar on boiling hot; cover them with cabbage leaves and cover them tight. In forty-eight hours they will be fit for use.

2nd. Pick cucumbers each morning, let them stand in weak brine three or four days, putting in mustard pods and horse radish leaves to keep them green. Then take out and drain, covering with vinegar for a week; at which time take out and drain again, putting in vinegar, adding mustard seed, ginger root, cloves, pepper and red pepper pods, of each about one or two ounces, to suit different tastes, for each barrel.

The vinegar must be changed once, as the large amount of water in the cucumber reduces the vinegar so much that this change is absolutely necessary, and if they should seem to lose their sharp taste again, just add a little molasses or spirit, and all will be right.