

1. If the roots of a tree are frozen out of the ground and thawed again in contact with air, the tree is killed.

2. If the frozen roots are well buried, filling all the cavities before thawing any at all, the tree is uninjured.

3. Manure should never be placed in contact with the roots of a tree, in setting it out, but old finely pulverized earthy compost answers well.

4. Trees should always be set about as deep as they stood before digging up.

5 A small or moderate sized tree at the time of transplanting will usually be a large bearing tree, sooner than a larger tree set out at the same time, and which is checked necessarily in growth by removal.

6. Constant, clean, and mellow cultivation is absolutely necessary at all times for the successful growth of the peach tree, at any age; it is as necessary for a young plum tree, but not quite so much so for an old one; it is nearly as essential for a young apple tree, but much less so for an old orchard; and still less necessary for a middle aged cherry tree.

7. To guard against mice in winter with perfect success, make a small, compact, smooth earthy mound, nearly a foot high, around the stem of each orchard tree.

8. Warm valleys, with a rich soil, are more liable to cause destruction to trees or their crops by cold, than moderate hills of more exposure, and with less fertile soil—the cold air settling at the bottom of valleys during the sharpest frosts, and the rich soil making the trees grow too late in autumn, without ripening and hardening their wood.

9. The roots of a tree extend nearly as far on each side as the height of a tree; and hence to dig it up by cutting a circle with a spade half a foot in diameter, cuts off more than nine-tenths of the roots; and to spade a little circle about a young tree not one quarter as far as the roots extends, and call it "cultivation," is like Falstaff's men claiming spurs and shirt collar for a complete suit.

10. Watering a tree in dry weather affords but temporary relief, and often does more harm than good, by crusting the surface. Keeping the surface constantly mellow is much more valuable and important—or if this cannot be done, mulch well. If watering is ever done from necessity, remove the top earth, pour in the water, and then replace the earth—then mulch, or keep the surface very mellow.

11. Shriveled trees may be made plump before planting, by covering tops and all with earth for several days.

12. Watering trees before they expand their leaves should not be done by pouring water at the roots, but by keeping the bark of the stem and branches frequently or constantly moist. Trees in leaf and in rapid growth,

may be watered at the roots, if done properly.

13. Young trees may be manured to great advantage by spreading manure over the roots as far as they extend, or over a circle whose radius is equal to the height of the tree in autumn or early winter, and spading this manure in, in spring.

14. Never set young trees in a grass field, or among wheat, or other sowed grain. Clover is still worse, as the roots go deep, and rob the tree roots. The whole surface should be clean and mellow; or if any crops are suffered, they should be potatoes, carrots, turnips, or other low, hoed crops.

PREPARATION AND MANAGEMENT OF LAWNS.

The following essay, which we copy from the Gardener's Monthly, was lately read before the Pennsylvania Horticultural Society, by William Bright:

The first important point in the preparation of a lawn, is to obtain an open, porous, well-drained soil, of *good depth*. To this end, if the soil be naturally wet, it must be drained in some manner, either by tile or stone drains. If sufficiently drained, the requisite depth may be obtained by thorough ploughing and subsoiling, using such ploughs and such force of team as will open the soil to the depth of eighteen inches at least. On grounds of any extent, this is cheaper than trenching, and quite effectual.

The subsoil ploughing should be performed in the dry weather of the summer or fall previous to seeding the following spring. Free harrowing is of course useful.

The *quality* of the soil must next receive attention, and it is vastly important that this should be of *uniform quality* all over the surface, and of *uniform depth*. Nearly all lawns are graded more or less, and when this is done, be careful that the soil is kept of uniform quality and thickness. The surface soil must frequently be taken off large spaces, and after the grading has been done, it must be replaced in such a manner that it shall as nearly as possible resemble in quality and depth the natural soil of the lot.

Sandy soils, as everybody knows, may be greatly improved by a dressing of clay or good clayey loam, and clay soils by the addition of sand. This is a simple fact, but one not sufficiently heeded in the hurry which usually attends the preparation of new grounds.

As to manuring, if the land be very poor, it may be heavily manured in the fall, with good, short, well-rotted stable manure; or with a compost of muck or stable manure. Bone dust, superphosphate of lime, and wood ashes are of course valuable additions to such a compost. If the land is good,—that is, good corn or wheat land,—it will need no manure. It is not so much