

Garden Orchard and Forest.

Climatic and Scenic Influence of Evergreens.

Our greatest regret regarding pines is, that we cannot get enough of them, or set them fast enough. We would have a line of them on the northerly side of every orchard we cared to cultivate, and on every barren or unsightly knoll, and in every spot on the farm where they would protect the fields from the fierce winds and storms of winter. There is scarcely a farm upon any sandy plain, or exposed hill-side, that could not be made to produce more and better crops if one-eighth of the land now cultivated were judiciously set to evergreen trees. They break the force of violent winds in summer, when the tender crops are growing, and in winter, when the fields are bare. Growing around farm buildings, they afford a welcome shelter for poultry, and other animals, and scattered over a farm, in the right places, they add a charm to the scenery which nothing else can.

Pines seem to increase the temperature of the surrounding atmosphere. Let one try the experiment some cold, windy day, of standing for a short time on the northern, and then on the southern side of a pine grove. The difference in the climate is often as great as between March and May. The north winds as they come down over the snow-covered hills, are checked in their course by the millions of fine, narrow leaves which hold the air stationary, like the double walls of an ice chest. It is not always the coldest air that is the hardest to bear. We all know how much colder it seems to ride against, than with the wind, in a cold day. Cold air in motion, takes the heat rapidly from everything with which it comes in contact.

Dry, still air, or as it sometimes called, dead air, is an excellent non-conductor of heat. Dead air keeps ice from melting in the ice-house and refrigerator. Dead air in the walls of stables keeps the cattle warm, and the manure from freezing. Dead air around our own bodies affords excellent protection from the cold air outside; and dead air, held comparatively stationary among the fine, needle-like leaves which cover our pine trees, affords an excellent protection from the cold to whatever comes within its influence. The heat our animals and our plants thrive in so well comes from the sun, and we should endeavor to save it as much as is within our power by protecting our stables and our fields from the fierce winds which, when unobstructed, carry away this heat and disperse it so rapidly.

To this end, pines or other evergreen trees may be planted on the exposed sides of fields or buildings with marked effect and great advantage. Besides their use in tempering the climate, they are, when well grown, a beautiful addition to any landscape, either in summer or in winter. As we often see them, they are an eyesore and a blemish, as when standing on the sunny side, and close up to the windows of living rooms; or, if such mistakes in planting have been made, where they are trimmed up from ten to twenty feet high, leaving the stems bare and the tops looking like poor specimens of toad stools perched upon tall bean poles. When evergreen trees are found to be in the way or in the wrong places, and trimming is suggested as a remedy, the trimming had better be done very near the roots. A pine tree, when grown alone and as nature designed it should grow, a perfect pyramid of green, is one of the most beautiful sights in nature, but when mutilated by the hand of man, as many often are in private grounds, they are about as forlorn looking specimens of tree growth as one could well imagine. One valuable characteristic of our native white pine is its ability to grow rapidly on very poor, thin land. There are thousands of acres of barren land in New England, both in large tracts and in small patches, which, if planted with pines, would, in a few years be enhanced in value many times the cost of planting.—*New England Farmer.*

Sowing Garden Seeds.

The commonest error is to sow too deep. Seeds want moisture before they will grow, but they do not like to stay in water. They need air and moisture—not moisture or water alone. When, therefore, water lies long about a sprouting seed, and the air is prevented from operating at the same time, the young plantlet is tolerably sure to rot away. Now the danger from water is just in

proportion to the depth the seed is below the surface. Very soon after the rain the surface dries. Beneath the surface it is longer in getting away; the nearer the surface, therefore, a seed can be sown, so that it can be kept regularly moist, the surer the seed is to grow.

Of course the texture of the soil has much to do with modifying depth. In a light, sandy soil, water will pass readily away, and the necessary air will follow more readily than it will in a stiff soil; the seed, therefore, that would be in great danger in a quarter of an inch of depth in a heavy soil, would come through an inch of sand; and it is this which renders it impossible to give any rule as to the proper depth to sow the various kinds of seeds, and the necessity of a philosophical chapter like this, which attempts to show the principle of successful culture, rather than a regular rule for the people to follow.

If we could have a regular moisture right at the surface of the ground, and keep secured against any sudden drying, it would be best to sow entirely on the surface, but, as we cannot, results the necessity of covering a little with earth; but if attention be paid to a proper powdering or pulverizing of the soil, we might get the seed much nearer the surface than is generally thought possible.

To know our meaning from experience, which, after all, is the best teacher, let a piece of ground newly dug or ploughed stay for a day or two in its rough condition, until the coarse cloddy pieces are a little dry. Then walk across the ground. If next day the footprints be examined, the crushed soil will be found of a dark brown color, which dampness gives to soil, while the other portions of the land are nearly dried out.

A seed trod in under foot at the time of making these footprints would be nearly sure to grow, while any scattered in the coarse soil would run the risk of either being dried out or drowned out by getting too deep under the soil. Indeed, we know of one man, who has the best success in raising garden vegetables of any man we know, who always sows his seeds by treading them in. He takes care to get good seed from a reputable source, and then sows on the surface. The ground is first forked up, and lays a day or two to dry. Of course it is made tolerably level, but no special attempt is made to have the surface particularly fine.

When ready to sow, the garden line is stretched in the direction desired, and the seeds sown thinly along the line on the surface of the ground. Then he walks along sideways, each foot closely one after the other, along the line, and the seeds trodden in. He seems to have every seed to grow, and they grow early; and another advantage is that they rarely require much thinning out.

Transplanting Trees.

Everyone thinks he is competent to transplant trees, but were this the case we would see fewer failures than we do. Anyone able to handle a spade can, it is true, dig a hole in the earth, put the root of the tree in it and cover it; but it is not after every planting that the trees will grow, and continue to grow. We have had some experience in planting trees on our own account for years, and we can recommend the following clipping from the *Ohio Farmer* as a plain and practical method:—

One of the most important things in connection with tree planting, is to secure them in good condition. This is of the first importance. In ordering trees this matter should be insisted on, and no tree should be accepted that gives evidence of bad handling. As much root as possible should be secured, as on this largely depends the success of the operation. If to be conveyed any distance they should be securely packed. A failure here may result in serious loss. The money paid for boxes and packing is often the most profitable part of the investment in a bill of trees. As soon as received, trees should be unpacked and heeled in, that is, laid in an inclined position and the roots thoroughly covered with fine, damp soil. From here they should be taken only as they are set, and should not be exposed to the air long enough to allow the roots to get dry; and especially should they be protected from sunshine. Before planting, the roots should be shortened in if very long, and all that have been cut or mutilated must be cut off smooth. This should be done with a sharp knife, at an angle of forty-five degrees, from below, leaving the upper part the longer. This will prevent the entrance of water, which would cause decay;

it will also leave the root in the best condition to foam a callous around the wound from which the new rootlets will start. The roots should be well puddled, or dipped in a thin mud till every part is thoroughly coated with it. The place being prepared, the tree should be placed in its position, so that when the job is complete the tree will stand an inch or so deeper than it stood in the nursery, and be so raised that when fully settled it will stand on a slight elevation. If the soil is wet it is well to place the tree just on the surface, and raise the soil in a gentle manner around it. This will serve in some degree to lift the roots above the excess of wet in the deeper soil. In setting, the tree should be placed in position and held by a helper while the planter, with his hand, arranges all the roots in the most natural position possible, and packs the fine, rich soil among the roots. Every crevice and corner must be filled and packed, so that no vacant space shall exist about the roots, as such a vacancy will result in the decay of so much of the root as is not in contact with the soil. The soil should be packed as solidly about the roots as moderately dry soil will admit of. No pulling or shaking of a tree while setting is admissible, as this is very apt to result in leaving open places among the roots. It is a good idea, when the roots are just covered, to pour in part of a bucket of water; when it has settled away, draw the remainder of the dirt in and gently tramp it with the foot. The tree should be slightly inclined against the prevailing wind of the locality, and if very windy it will be a good plan to raise a mound of eight inches to a foot in eight around the trunk till it is established. Many persons are troubled to get their trees to range in the rows properly; even after having the ground staked off in good order they still find their trees stubbornly refusing to range in straight rows. This difficulty may be obviated by the following contrivance: Take a board four inches wide and eight or nine feet in length; near each end have an inch hole, and saw a triangular notch two inches wide and the same in depth in one edge about the middle. Make two wooden pins or pegs one foot long, and of a size that they will easily pass through the holes. The stake being set in the exact place where the tree is to stand, lay the gauge down so that the stake will stand against it in the centre of the notch; now drive the two pins through the holes to half their length in the soil, lift of the board; leaving the pins sticking in the ground, dig the hole and put the tree in its place, replace the gauge, and, having the trunk of the tree in the notch just as the stake stood before, hold it there till the filling in and packing is all done, and the tree will stand in the exact place that the stake occupied. Proceed in this manner with all the trees, and if the stakes were properly set at first the trees will range as a matter of course. This method is doubtless familiar to most of our readers, but there may be those who do not understand it. An orchard is an object of such premanence that it is worth some trouble and expense to have the trees arranged in a neat and tasty manner.—*L.J.T.*

Value of Road Dust.

During the dry season of late summers, every country resident should secure several barrels of road dust. It is worth many times its cost as an absorbent. Those who keep poultry secure by its use a valuable fertilizer, nearly as strong as guano, with none of its disagreeable odor. Place an inch or two of road dust in the bottom of the barrel; then, as the poultry house is regularly cleaned, deposit a layer an inch thick of the cleanings, and so on alternately, layers of each till the barrel is full. The thinner each layer is, the more perfect will be the intermixture of the ingredients. If the soil of which the road dust is made is clayey, the layers of each may be of equal thickness; if sandy, the dust should be at least twice as thick as the layers of droppings. Old barrels of any kind may be used for this purpose; but if previously soaked with crude petroleum or coated with gas tar, they will last many years. If the contents are pounded on a floor into fine powder before applying, the fertilizer may be sown from a drill. Road dust is one of the most perfect depollutizers of vaults—converting their contents also into rich manure. Place a barrel or box of it in the closet, with a small dipper, and throw down a pint into the vault each time it is occupied, and there will be no offensive odor whatever. This is simpler, cheaper and better than a water-closet, and never freezes or gets out of order. Mixing the road dust with an equal bulk of coal ashes is an improvement, making the fertilizer more friable.—*Country Gentleman.*