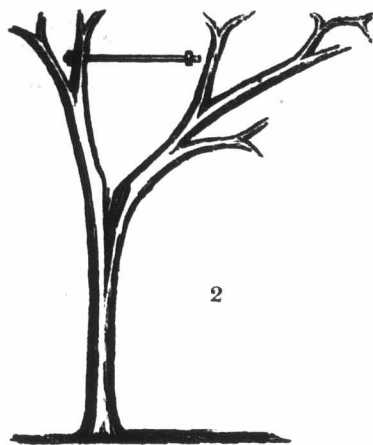
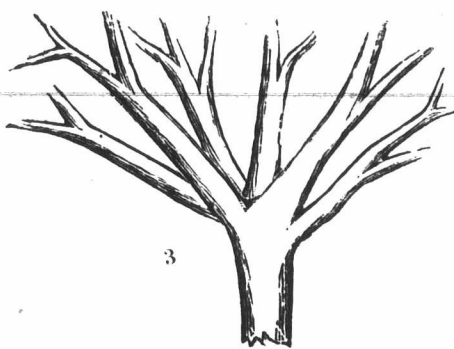


Our First Snow Storm.

On the 23rd of October we had in this section a heavy fall of damp snow, the flakes being very large. The leaves were yet green. The snow was just damp enough to remain where it fell, and every leaf was soon covered. The snow continued falling, varying in depth from a few inches to fourteen inches in different localities. The snow in this manner accumulated in heavy masses on the trees, as there was no wind to move them nor frost to dry the snow. The result has been that there are more limbs broken from trees and more trees destroyed than we have seen for the past 12 or 14 years. About that length of time ago, when we lived on our farm, we had a beautiful young



orchard, some of the trees of which were so badly damaged by a similar snow storm that we thought they would be of no further use. The trees were, as many of them were at the time of the recent storm, covered with foliage and laden with fruit. One of our finest trees was split nearly in two; one-half of the tree was nearly broken off and lying on the ground, the other half was left standing. We did not like to destroy it, as it was a constant bearer, and we had not many trees in full bearing at that time. We cut off the broken half and trimmed back the other limb a little; the following season the tree put out buds on the side that was damaged. We never saw such a rampant growth of wood as that tree made on the damaged side, and it continued to force wood to replace the damage done. Now it has become a respectable



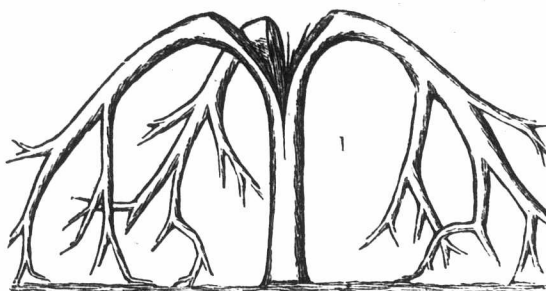
looking tree again; the great wide split that was made is now only a small flaw in the side of the tree. There are many thousands of apple trees now badly damaged; some are totally destroyed. But where trees are young, with a little judicious trimming back of limbs that are left to allow a tree to balance its head, many apparently ruined trees may be restored; if the trees are old and badly broken past recuperation, it will be best to re-plant, but if young the roots that are now in the ground will force a tremendous growth of young wood. This young wood should not be cut away the first year, although it may be ten times more dense than is required. It prevents the roots from dying back. In a year or two you can gradually remove the wood that is not wanted.

No one would believe that such an amount of

damage could be done unless they could see it with their own eyes. In one orchard near this city half the trees are very badly injured, and many are totally destroyed. We have had a few illustrations made to show the forms of trees that are most suitable to resist the heavy weight of a crop of apples or a heavy snow fall; for what has happened will most probably be repeated, and as prevention is better than cure, this lesson may be now taught with profit to all.

Cut No. 1 represents a fine tree that was growing on the O'Brien estate. We omit the foliage and show the wreck when split into three pieces and totally destroyed.

Cut No. 2 shows a half tree that in an extreme case might be made to retain its wood for bearing.



If young it would be better to cut the limb off, but in the case of a mere crack or split in the stem of a tree the plan of putting an iron bolt through the tree and supporting it may be practised with much benefit.

Fig. 3 represents a tree saved. We have seen some trees that most assuredly must have been broken down with their own fruit without the additional weight of snow, that have stood through many a heavy load and many a storm. You can easily judge, if you have a mechanical eye, trees that this system would serve, and by the small expense of an iron rod and nut you could strengthen some of yours. It only requires an augur hole bored through the two limbs, and tightening the nut. We have seen no evil effect to the trees where this plan has been adopted.

Fig. 4 shows the plan carried out which we suggested in a previous issue.

Fig. 5 represents a limb that has been made to



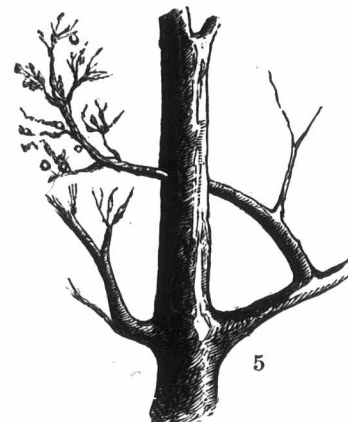
support another. This plan may also be adopted. Bore a hole through the limb of a young tree and bend a twig through it. They will grow together, and give great strength to the tree.

Fig. 6 shows the proper form of branches. This can be obtained only by a judicious pruning back of young trees which should always be done. Too many are afraid to use the knife and cut off the top of a young tree, but you may see from the above illustrations the bad effects of having badly shaped tops as well as the forms you should try to obtain. If you have trees that you are afraid of being destroyed it is far better to cut them

back or brace them properly than to let them be destroyed. When you remove the limbs that are broken, smooth the part off with a chisel, and smear the wound with grafting wax.

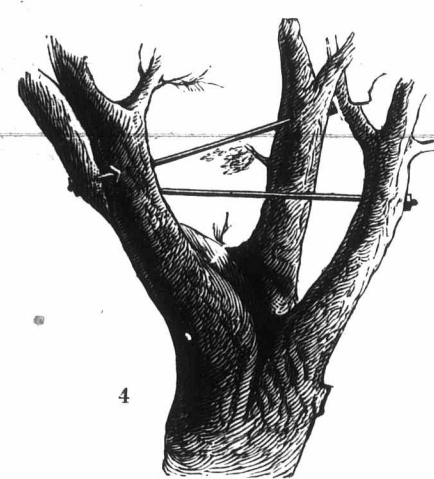
Garden Cultivation.

As to this matter, we farmers are very negligent. An acre of good soil well cultivated will supply a small family with all the vegetables and most of the fruit which it ordinarily consumes during the year, while two acres will do the same for quite a large family. Autumn is the best time to prepare the garden for spring planting, which if properly done greatly lessens the labor in the spring, and enables the gardener often to get his vegetables from one to two weeks earlier than if this previous preparation had not been made. My method is to first turn each furrow six to twelve inches deep,



according to the nature of the soil, taking care to throw up only the richer part of it, and as fast as this is done follow with a subsoil plow (of which Miner's patent is the easiest draft and very best yet made for this purpose), stirring and finely pulverizing but not turning up this subsoil, to as great a depth as the power of the team is capable of doing. Thus the fertile soil is kept on the surface from the rapid growth of the crops early in the season, the roots of which, if required, will gradually seek the poorer lower soil later in the season.

When the ploughing is finished I do not harrow, but spread coarse fresh stable manure over the soil as soon as possible. This keeps it warm during the winter, and rots by spring sufficiently well to be ploughed in. Many contend that by spreading the manure in autumn all its salts are washed out and leach away through the soil before



the time comes round for planting, and are thus lost. I do not think so, for I have had heaps of manure repeatedly composted on a soil of coarse white sand, lying there for six months, and after removing it I dug into the sand and found it only slightly discolored to a depth of two or three inches. On a good garden mould there would be only the slightest discoloring of the surface, and I think no wastage of the salts of the manure; but even if there was a little of this during winter, the loss would hardly be equivalent to the benefit of covering the soil and preventing its being injured by the sun and winds. The surface lying so rough from the ploughing, prevents any washing away by rains from the manure, as might be the case on a smooth surface when hard frozen.