Month by Month
With the Trees

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Editor’s note: Almost every greenkeeper has trees to take care of and loses a certain number every year. That’s why we have enlisted the aid of Mr. Scherer, a nationally noted tree doctor, to tell us what happens to the trees through all seasons of the year. It’s a precious work, saving trees, and we believe the greenkeepers of America will appreciate Mr. Scherer’s contribution to our worthy cause.

"You know I never prune my trees. I let Nature do the pruning. That’s what happens to the trees in the woods and they always seem to be in pretty good shape."

The above is the answer I received a short time ago when talking to an owner about pruning his trees. This owner has expressed an idea which is quite generally prevalent about pruning trees. Pruning is such a common operation and has been practiced for so many years that the old adage of "familiarity breeds contempt" applies most admirably in this case. Many people believe that pruning is not an exacting operation and it can be done by anyone or not at all, as suits the convenience and pleasure of the one in authority.

In spite of this general feeling, it is nevertheless true that, conservatively speaking, 75 per cent of the decayed areas in the trunks and larger branches of trees result from either improper pruning in the first place, or improper care of the pruning wounds after the branches have been removed.

Pruning can be defined as the proper removal of dead, diseased and superfluous branches. It is quite evident that dead and diseased branches are a decided menace to the health and vigor of any tree.

Superfluous branches are those which interfere with the proper development of the tree or they may be those which interfere with activities which may go on in the neighborhood of the tree. In some cases, superfluous branches may interfere with the beauty of the tree, and in all cases the proper removal of the interfering branches is necessitated for the satisfaction of those concerned.

When you speak to the person who allows Nature to take care of his trees about removing the dead branches, the usual answer is: "They will soon fall off anyway. So why expend the energy and money required to take them off?" It is true that these branches will fall off, but too often results are disastrous and this is equally true of the diseased branches.

Dead and Diseased Limbs Menace to Life

One needs only to read the papers carefully for reports of fatal accidents caused by falling branches. The citing of one specific instance will illustrate what often happens. This particular accident occurred July 4, 1921. A business man from one of our moderately large cities took his family for an automobile ride and a picnic lunch in a park some twenty miles distant from his home. The lunch was spread on one of the tables supplied by the owners of the park and the family were enjoying their meal when a diseased branch crashed down some sixty feet from one of the neighboring trees. The branch struck the business man, breaking his neck and of course instant death occurred. His wife became a widow and his children fatherless because of the breaking off of this branch. Although this may seem to be an unusual case, it can be duplicated many times in the course of a year.

Broken Branches Spread Rot Into Trunk

Not only are falling branches a menace to the life and limb of people who may be in the vicinity of the tree when the branch gives way, but they are also decidedly detrimental to the health and physical strength of the tree itself. When a dead branch breaks, you will usually find that the break occurs about a foot or so from the point of attachment of the branch to the trunk. This leaves a dead stub on the tree. The weight of the stub is not sufficient to cause it to break again, neither will the weight of ice or snow or the force of the wind exert enough pressure on it to cause it to break again. Consequently, the only way the stub is removed is by rotting away. This may take several years. In the meantime it is impossible for the wound to heal and the decay extends from the stub on into the parent stem or trunk and a beginning is made which will end in the destruction of the tree.
1. Before pruning a low hanging branch which obscures a fine view. See Cut No. 2

2. After removing thick leaf growth, a beautiful vista appears. See Cut No. 1
of that parent stem. It seems that it should be plainly apparent to any individual that the removal of the dead branches which are always a menace to persons and property in the vicinity of the tree and to the life of the tree itself is far more economical than is the practice of allowing the branches to fall and the stubs to rot away.

**Many Practical Reasons for Judicious Pruning**

When one is removing superfluous branches which interfere with the proper development of the tree, it is sometimes difficult to determine just which branches should be removed. Oftentimes one finds two branches trying to occupy the same space, with the result that neither is properly developed and that each is doing more or less damage to the other. In such cases, it is necessary to determine which of the two branches is the more important, which one can fill the place most effectively, and then remove the other so that the one may develop without restriction. Occasionally one finds trees, when this practice has been neglected, in which two or more large and important branches have so interfered with one another that the resultant damage makes it next to impossible to save either of them and since the damage results in the destruction of one or both of the branches, the beauty and the usefulness of that individual tree is destroyed at the same time.

Many times it becomes necessary to remove branches which interfere with activities going on in the neighborhood of the tree. Probably the most outstanding examples of this are supplied by the trees along our streets and roadways. The branches may interfere with pedestrians who use the sidewalks. They may interfere with automobiles using the roads or streets. Or they may interfere with public service wires which go overhead. Of course, the pedestrians must use the sidewalks, the automobiles must use the streets, and probably for a considerable time at least, the public service wires must be suspended from poles along our streets and roads. When pruning of such superfluous branches must be done, a great amount of care must be used so that the sacrifice made by the trees is not too great. The trees give, in their beauty and shade, both an intrinsic and an esthetic value. Whereas, the streets, sidewalks and public service wires represent a definite intrinsic value and when these two values, the one represented by the trees and the other represented by the activities which go on in the neighborhood of the trees clash, it is necessary that each make a sacrifice for the benefit of the other. The happy medium where neither sacrifices too much and where each sacrifices enough, is the ideal to be sought but at the same time, it happens to be an ideal exceedingly difficult to find.

All of us have seen trees which for the exception of one or two straggling branches, are exceedingly beautiful. When these straggling, unsightly branches are properly removed and the merited beauty is given to the tree, one of the purposes of pruning has been accomplished.

**Cut Close With Sharp Tools**

In the actual pruning operation, many tools of different kinds are used. In removing small branches, a good sharp pruning knife or pair of hand pruners are very effective. In the removal of larger branches, a saw is requisite and because the wood to be cut is green and unseasoned, a saw made for that purpose is by far the best. All of the better known saw manufacturing companies make saws especially designed for the pruning of trees. Some concerns make pruning saws with long pole handles and these are quite effective in removing small branches high up in the tree. There are also on the market numerous so-called pruning hooks which are built on the same principle as are the pruning shears, but are on the end of a long handle. The hooks can be used to remove twigs which are high up in the tree.

When the branches are removed, considerable care is necessary to insure the most effective healing of the resultant wounds. The cut must be made flush with the parent stem. If a stub is left, healing will not take place. In fact, healing is impossible until the stub is gone. When a tree heals a wound, the healing material in the form of refined sap comes down from the leaves. When a stub is left, there are no leaves beyond the wound and the healing material coming down from the leaves which may be higher on the parent stem will not move out the stub and heal it. When the cut or wound is flush with the parent stem, the healing material coming down from above washes the sides of this wound and healing takes place quite rapidly and in a comparatively short time, the wound is covered with callus and the protective covering of bark is again restored.

**Correct Method of Removing Large Limbs**

Special precautions must be exercised when large branches are removed. Too many times, carelessly removed large branches result in great ugly tears in the bark and wood of the parent stem below where the cut is made. The weight of the branch is so great that the wood cannot support it until the final cutting is done, but gives way and strips down, causing a wound which in some cases extends a number of feet down the trunk. To properly remove a large branch, it is first necessary to start cutting about a foot or so out from the parent stem and on the underneath side of the branch. Cut through as far as possible until the saw "pinches" and then start cutting on the upper side, an inch or two either way directly over the undercut. This method allows the branches to snap off clean, leaving a stub about a foot long which can then be cut off at the proper place without fear of damaging the parent stem.

**The When and How of Pruning**

I have often been asked when is the best time to prune, and I usually answer with what is seemingly a (Continued on page 40)
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rather flippant reply: "Prune when your knife is sharp." In other words, pruning can be done successfully at any time of the year. The results to be obtained usually determine the time of year to do pruning. The most rapid healing results from pruning done in the early part of the summer. The greatest growth is stimulated by pruning done at the same time. Trees are checked most in their growth by pruning done in the late summer and fall, and so on for the many various purposes which one may desire to obtain through pruning, so that one must necessarily determine the results desired and then prune accordingly.

After the pruning operation is completed, the care of the resulting wounds is exceedingly important. When twigs are removed, ordinarily no care is given to the wound. It is more or less comparable to a small clean cut in one's skin, which in ninety-nine cases out of a hundred will heal up quickly, with no resultant damage. Wounds resulting from the removal of branches from one-half to two and one-half inches in diameter should be thoroughly dressed with some antiseptic wound dressing, because if they are not so treated, decay will surely start before the wound can be healed.

Use a Good Wound Dressing

Ordinary lead paint is not a good wound dressing. In fact, it has been pretty definitely proved that paint is worse than no dressing at all. The Sherwin-Williams Company manufactures and markets a product known as the Sherwin-Williams Pruning Compound which can be purchased at most any Sherwin-Williams store, that is very good. Some writers have recommended coal tar and creosote for treating pruning wounds. These are not satisfactory because the creosote is exceedingly toxic to living wood and instead of helping the healing, distinctly retards it and sometimes kills back the bark as much as two or three inches beyond the original outlines of the wound. Even the best wound dressings are only good for two or three years at the most and have to be replaced.

Because the human mind has a tendency to forget, it is always best to treat pruning wounds which are three or more inches in diameter in some permanent way so that forgetfulness will not prove disastrous. On these larger wounds, it is a good practice to excavate an inch or two of the sound wood and fill the resultant cavity with cement, which will form a permanent protection to the exposed wood and form a solid, indestructible base over which the callus can readily grow.

There are so many limiting factors in pruning, so many details which mark the line between success and failure, that the pruning operation deserves far more careful attention than is the common practice at the present time. Pruning is an important operation and should be given the utmost care and thought, if the desired and not disastrous results are to be obtained.

Say you saw the ad in The National Greenkeeper