Month by Month With the Trees

By C. M. SCHERER
Principal of The Davey Institute of Tree Surgery, Kent, Ohio

DURING the past few years the game of golf has grown so rapidly that many new courses are being built every year. At the same time people have come more and more to a realization of the value of trees on their course. As a result many of the courses are built in the woodlands. When the trees are growing in the woods they are surrounded by natural conditions. But when the golf course is made those conditions are usually changed, and a change of conditions is almost invariably harmful to trees, especially to the larger, older ones, which naturally have the most value.

During their lives in the woods the trees have accustomed themselves to a certain amount of available water. Each year the leaves fall to the ground, remain where they fall and in rotting, return to the soil the elements extracted by the tree. In this way the soil is always mulched. It is always rich in humus.

Drainage Ditches Rob Trees of Water

When a course is built, however, usually one of the first operations is drainage. Drainage materially interfers with the supply of water as it has previously existed. The open spaces left when the trees are removed for the fairways, tees, and greens allow both the wind and the sun to dry out the soil much more rapidly than formerly when the whole area was wooded. Not only has the drainage interfered with the water supply, but also the sun and wind cause great quantities of water to evaporate into the air, leaving an insufficient quantity for the remaining trees, especially those trees which are along the edges of the fairways.

Wind Blows Away Natural Covering of Leaves

Along with the disturbance of the water supply these factors, especially the wind, have a decided influence on the humus content of the soil. Prior to the building of the course the leaves came down in the forest and remained where they fell. With wide areas opened up for fairways the wind has a chance to sweep across the ground and blow the leaves away, so that the ground is swept clean under what usually happens to be the most valuable and important tree.

It is not at all uncommon to see a screen of trees a few yards wide between two adjacent fairways. Such trees are always important, but the construction of the two fairways has so changed conditions that the trees are not numerous enough to make a woods, or woodsy condition, but have to grow almost entirely as individuals. It is under such conditions as this that the destruction is the greatest. Always the largest and best trees succumb first, and the various members of the club are almost distracted, not only because of the destruction of their beautiful trees, but also because of the unsightliness and added expense which dying trees always bring.

I have in mind a golf course in Akron which very nicely illustrates this situation. Their number five fairway extends for some one hundred and fifty yards into the woods, where the green was at one time surrounded by beautiful big trees. Immediately to the right of the number five fairway is the number three fairway, so that for a part of the distance at least, there is a narrow strip of woods between the two. For a few years after the construction of the course the trees were gorgeously beautiful, and then the evidence of their decline made its appearance. First one and then another of the large top-most branches of the trees died, so that now, some ten years after the construction of the course, the beauty of a number of the holes has been largely destroyed.

Saving Trees Along Fairways Difficult Problem

The unfortunate thing about the whole situation is the fact that control measures are, to a great extent, incompatible with the game of golf, especially when it is impossible for even the best players to always keep the ball on the fairway. Remedial measures can be applied in one of two ways, either of which, is very unsatisfactory from the player's standpoint. First, low growing ground covering plants like myrtle, honeysuckle, and various other plants which will shade the ground, even when surrounding tees have been removed, and will hold the leaves, can be planted. Or the ground can be cultivated and herbaceous ground covers, such as pachysandra

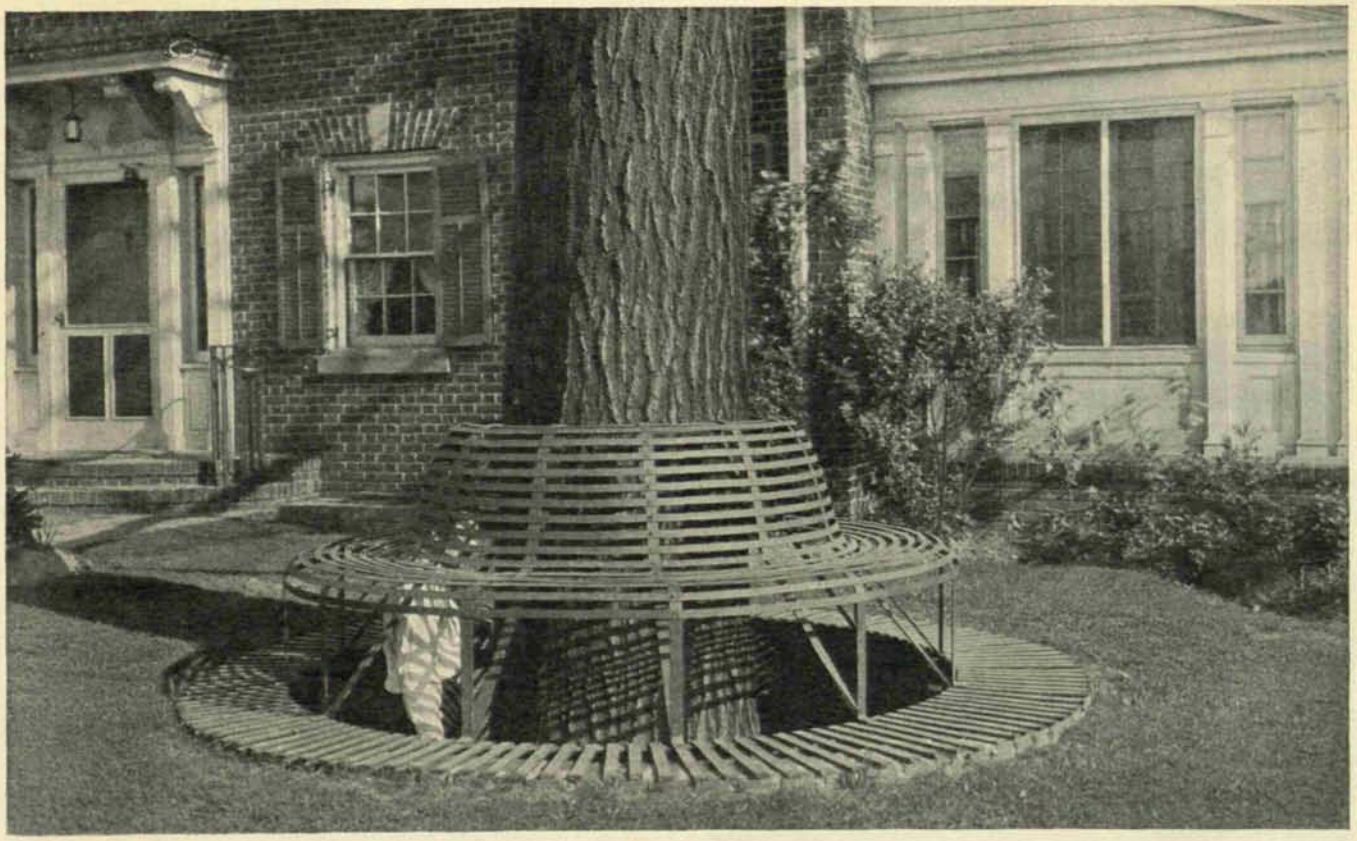
can be planted. It is quite evident that either method would make almost a jungle along the edge of the fairway, so that every ball that went into the rough would be lost. Lost balls would take much of the joy out of the game when playing on that particular course, and the course would naturally lose much of its popularity. The very reason for its existence would be destroyed.

Plant Young Trees in Time to Replace the Old

In spite of adversities it is still possible to have the tree screen between two adjacent fairways. In order to have it, however, it is necessary to appreciate the condition of the existing trees, especially the old ones. When a young tree grows up under the adverse conditions, which it finds on a golf course, it adapts itself to those adverse conditions, and will make a good specimen in spite of them. If, when the course is built, small trees are started to take the place of those which will die in ten or a dozen years, a real step forward has been made in guarding against a treeless golf course. It is remarkable how much progress a young tree will make in ten to fifteen years. It is not at all unusual to see a tree twenty-five to thirty feet high produced in so short a time. Although a tree twenty-five to thirty feet high does not wholly replace a beautiful specimen one hundred feet high, it is certainly far better than no tree at all. Then too, it is a tree that is healthy and vigorous, good for many years to come.

Keep Specimen Trees Fertilized and Watered

Quite often there are possibly ten to twenty trees on a golf course which are especially important. Naturally those growing in the immediate vicinity of the club house are very valuable. Sometimes a specimen tree on the course is very important. Possibly it is the only tree in the neighborhood of a tee. Such trees are worth much more attention than is the average. For the preservation of such trees the water and food material needed to keep them growing can be supplied artificially. In other words the trees can be watered thoroughly each week. Of course the amount of water supplied depends to a large extent on the size of the tree, but all the ground occupied by the roots should be thoroughly soaked. This will require the use of a sprinkler for several hours. Then each year fertilizers which will supply food material for the tree can be applied.



Building this expensive well around the big oak above failed to preserve its life.

Preserving Trees When Changing Grade Levels

Oftentimes in building tees, greens, and club houses it is necessary to change the grade around valuable trees. There are few proceedings that are as surely fatal as are changes in grade levels. If the grade is lowered the tree stands up on a little mound and dies of thirst. If

the grade is raised the roots are buried, and the tree suffocates. It is next to impossible to save a tree when the grade is lowered. By taking the proper precautions, however, it is possible to save a tree when the grade is raised. In such cases it is necessary first to lay a circle of drain tile around the tree approximately under the tips of the branches. From this circular row of tile, radial rows of tiles should be laid to the base of the tree. Over the tile, to a depth of six or eight inches, gravel should be spread covering the entire area of soil occupied by the roots of the tree. Then around the trunk of the tree the gravel should be built up as high as the new grade level is to be. The tile and gravel are then covered with soil as deep as needed.

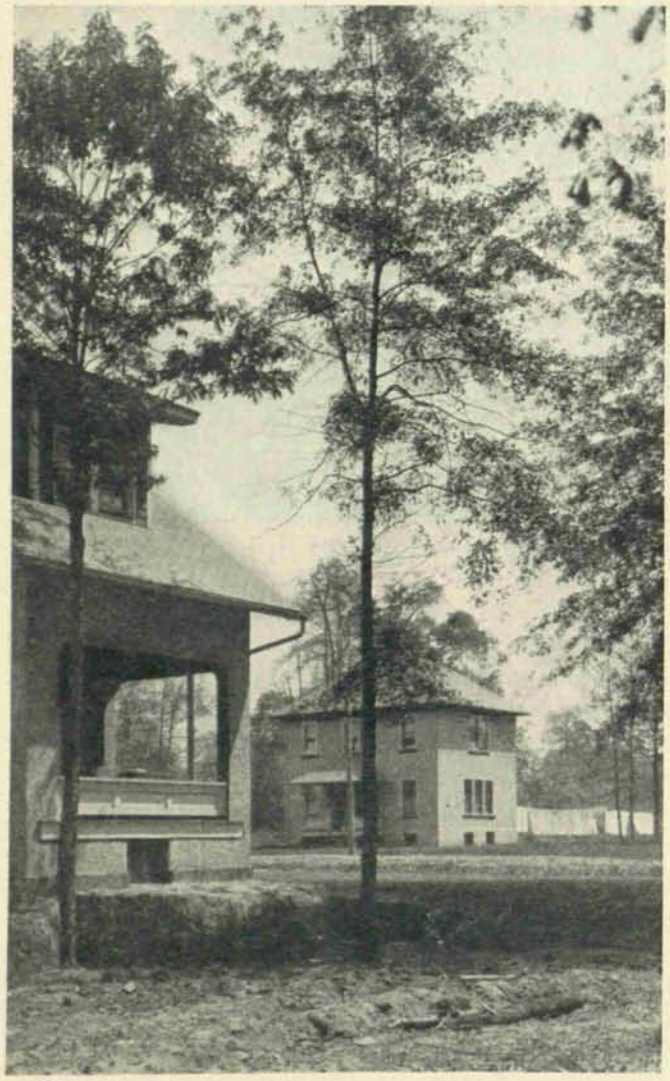
Quite often one sees wells of stone or brick built around the trunk of buried trees. These are little better than nothing at all. They do keep the soil away from the trunk of the tree, but make no provision for water and air to reach the spreading roots which extend out many feet from the base of the trunk. The tile and gravel make it possible for air to circulate over the original soil which is occupied by the roots, and also make it possible for water to seep in and supply the roots with this essential material.

Trees so treated can be expected to live on indefinitely. Trees that are welled around will sometimes live for three or four years, while trees buried without any provision will usually start declining the following year, and by the end of two or three years will be completely dead.

In Planning New Courses, Protect Your Trees

I have in mind one particular illustration of this. I know of a club house, which when built, had two beautiful maples on the southwest side. The bases of these trees were filled around in order to make a new grade. No provisions were made for air and water and now, after only a few years, the trees are dead and gone. Nothing is there to replace them. The club house is now barren and hot during the summer months, where formerly it was shaded and cool.

Members planning the construction of golf courses can well afford to at least get authentic advice regarding the trees before operations have gone too far. It is reasonably certain that by so doing they can save themselves money in the future and certainly they can save trees which would otherwise be destroyed.



Grading around this home buried these trees too deeply They are now recovering, since the soil was removed as shown

THE PATIENT

Said old man Jones to Doctor Buzz,
"I ain't so well as I once wuz;
There's somethin' must be ailin' me,
My back ain't what it used to be.

Why, doc, I ain't but eighty-four,
And them fool boys up at the store
Jes' called me in and laid a bet
To prove that I'm a good man yet.

They dasted me to lift a sack
Of wet cement, but my durn back
Give out before I got a-hold,
But 't'want becuz I'm gettin' *old!*

What, *me*, the strongest man in town?
Why, no man ever put me down!
With my back playin' me that trick,
I had to tell 'em I wuz sick!

By Gertrude A. Farley