When a large limb is removed improperly, the bark and wood are often badly ripped. This is the common result of removing the limb with only one cut. After the saw sinks deeper and deeper into the wood, the limb begins to sag. Finally, before the cut is completed, the limb crashes. Rarely does it break off clean. Usually, it rips the bark and wood on the lower side of the limb. The jagged wound which results is particularly susceptible to infection. Sometimes many feet of bark are torn away and the appearance of the tree is marred.

**How to Saw Off Branches**

To prevent such injuries, the tree expert makes three cuts with his saw. The first is made on the under side of the limb, a foot or two from the trunk. The second is made on the top side a little farther out. The result is that when the limb falls the break is clean—the ripping of wood and bark is stopped at the point where the first cut was made. After the heavy part of the limb is removed, the tree expert proceeds to remove the stub flush with the trunk.

Needless to say, spurs should never be used in climbing the trees in order to prune it. Each hole made in the trunk by the sharp points leaves an opening through which the tree can become infected. The results of such wounds are often far worse than the benefits gained by pruning out the deadwood. Tree experts get to all parts of a tree by the use of ropes which they have been trained to use with amazing dexterity.

Incidentally the ax is a tool which always should be left in the tool kit unless there are trees to be cut down. When a tree is pruned with an ax, the wounds are almost invariably jagged, and consequently will not heal rapidly. The tree expert always uses saws for pruning work, and the wounds are so cleanly made that the healing process is hastened.

Pruning is a very important and necessary phase of tree surgery. Dead branches in a tree are a serious menace—they often crash to the ground when least expected, destroying property and endangering human life. Moreover, the deadwood menaces the tree's health inasmuch as it is a favored camping ground for all kinds of bacteria, fungous spores and insects. There might well be a slogan: Remove the deadwood and save the tree.

It must be remembered, however, that pruning the deadwood out of a tree does not remove the cause of that deadwood. When branches and limbs die back, there is something wrong with the tree. It may be diseased; it may be starving to death; it may have been repeatedly defoliated by insects and its vitality so lowered that it is slowly dying; it may have girdling roots which are strangling it. Any one of a great many things may be wrong.

By making a thorough diagnosis of the tree's condition, the tree expert is enabled to determine the cause of the deadwood and treat the tree accordingly. Obviously this should always be done if the tree has any particular value to the golf course.

(This is the fourth of a series of articles regarding tree care written for GOLFDOM, by Martin L. Davey, president of the Davey Tree Expert Co.)

**ANNOUNCE NEW COMPOST MIXER AND SPREADER**

BEARDSLEY & PIPER COMPANY, 2543 North Keeler Ave., Chicago, have recently placed on the market a new compost mixing machine and a topsoil dresser. The manufacturer's announcement reads:

"This new Soilslinger (illustrated here) thoroughly cuts, breaks, mixes and aerates compost, completely pulverizes and prepares soil, sand and manure, and delivers a perfectly blended material into a fluffy pile or windrow. The unit is simply constructed, possessing a specially designed cutting cylinder to insure proper mixing and aeration of materials. It is made with pulley for tractor drive or with gasoline engine or electric motor. While the Soilslinger will meet every capacity requirement, it is particularly applicable, because of extremely low cost, for the smaller golf courses and the needs of estates, etc., where only one or two men are employed for turf maintenance."