

horse manure is lost. Therefore mushroom soil is only fit to use in connection with humus for substructure or the topdressing of putting greens. For this reason humus will supply the necessary fibre, also the organic matter and the live nitrifying bacteria which is lacking in mushroom soil. These elements are absolutely essential to the soil to make it physically able to retain and sustain the necessary moisture and plant food required by the grasses that go in the making of first-class putting greens and fairways.

Mushroom soil used for the topdressing of greens has in many cases caused considerable trouble to old turf and more so to young grass plants on new greens. A considerable part of the horse manure that goes to make up mushroom soil is not clean, straw-

bedded manure, but has much manure mixed with it that has been taken from stables that bedded on saw dust, pine chips and shavings, resulting in a toxic or fungus condition, since this rosinous material is positively poisonous to the soil and affects the development of the turf. Often greens treated with mushroom soil are attacked with the "Brown Patch" disease or a mildew fungus.

When such conditions exist there is nothing else to do but to remedy these conditions, which means a copper sulphate and lime treatment, expensive to say the least, and time lost.

Mushroom soil mixed with humus and local topsoil can be used with good results on the fairways, but the danger of a toxic element is always to be feared.

## Keep the "Rough" Cut Down

HELP REDUCE THE NUMBER OF LOST BALLS AND RELIEVE CONGESTION IN PLAY

**T**HERE is nothing so aggravating in golf as looking for a lost ball in the "rough," especially when your shot has not been a very bad one. Often the penalty in playing out of heavy grass is too great as it is almost impossible sometimes for the average player to recover in one stroke. Of course rough grass must serve as a hazard for a hundred yards more or less in front of the tees as well as off the fairways, but one should carefully consider what it is composed of.

Usually these areas are left in their natural condition and if the ground is already in turf the grasses contained represent the natural growth of the fast growing tall varieties, which require frequent mowing and usually form a difficult and unsatisfactory turf for the "rough."

It is much better to plough under or lift the natural turf along the edges of a course and in front of the tees and sow Sheeps Fescue seed as this will form a slow growing tough bunch grass much more suitable for the purpose. During the summer season this turf requires

very little cutting and its thin bunchy growth makes it easier to find one's ball and at the same time it offers sufficient difficulty as a hazard.

If the old turf is plowed under, sooner or later the natural grasses will assert themselves and clover generally appears, but if the old turf is lifted, or better still, the top soil scraped off a few inches to impoverish the soil, the Fescue will grow more bunchy and there is less chance of any of the objectionable grasses appearing later on.

Only three or four bushels of the Fescue are necessary to sow per acre, and the seed is not usually so expensive as the other varieties.

Another point in favor of a dwarf bunch grass for the "rough" is that if the coarse and objectionable grasses and weeds are allowed to mature the seeds are blown over the fairways and greens and later on are an expense to eliminate.

Keep the "rough" cut down if the existing turf is too thick and give it a dose of rock salt or rip it up and sow Sheeps Fescue.