The best authorities on golf grasses advocate seeding in the fall. In my opinion fall seeding of greens is preferable to spring seeding only in case water is piped to the greens. One can never count with any certainty on fall rains, whereas one is always sure to have an abundance of rain throughout April in this locality. We seeded both our first and second nine holes in April and obtained an excellent growth of grass. Fairways, which must depend upon rains, I feel, should always be seeded in the spring. I would seed greens the latter part of August if I had water, and if I did not have a water system I would seed them in the spring just as soon as it could possibly be done after frost was out of the ground.

The total cost for fairways, greens, and tees for the nine-hole course, measuring 3,139 yards, follows:

Labor	$2,275.95
Teams	799.45
Seed	1,168.00
Fertilizer	340.46
Sand	46.00
Total	$4,629.86

Labor for the most part cost us 20 cents an hour. We paid a few men 25 cents an hour, and the labor foreman received 30 cents an hour. Labor has since been increased to 30 cents and 35 cents an hour.

With the acquisition of reasonably good farm land I believe any club could closely approximate the figures I have given providing there is some member who understands work of this kind who will without cost devote his time exclusively to the project during the course of construction. Most every newly formed club should be able to find someone who is interested enough to do this.

Mr. Wilson, in his letter, asks how much was given us in the way of help. Neighboring farmers, realizing a country club would increase the value of surrounding property, donated considerable work. As I pointed out in a previous article, the big steel mills loaned us trucks and tools and made us benches and tee boxes. While no solicitation was made for funds outside of the regular membership fee of $100, several members voluntarily made donations, the total amounting to about $1,000, all of which went into the treasury and is accounted for in the cost of the course as given.

On Handling Peat and Compost

E. M. Barrows[1]

All good greenkeepers build compost piles, and the bigger the pile the greater the pride of the green committee. Layer on layer of soil, manure, sand, peat and what not—easy enough to build and a monument to foresight and thrift. After a few months it is time to turn it over, and a couple of men start at one end with shovels. After a week or so, the green committee really appreciates the size of that pile, and the club's treasurer also goes down to look it over. Finally the sifting begins and the awakening comes. The workman with his screen and shovel toils and toils, and at

[1] Chairman of Greens, Golden Valley Golf Club, Golden Valley, Minn.

the end of the long day there is a tiny heap back of the screen and a big pile of hopeless-looking debris at the side that would not go through the screen. When the task is done, there is just one monument left for the club's treasurer to see and that is the pile left over from screening, and then he will consider the purchase of a compost grinder.

There are a number of these on the market ranging from the home-made rig derived from an old thrashing machine cylinder to the more elaborate type. The one we are using at Golden Valley[2] has a grinding cylinder leading to a revolving screen. The machine may be run with a belt and pulley from a tractor or a portable engine. We use a long belt running to our tractor, which keeps the engine well away from the dirt and dust. The long belt also has the advantage of throwing off when a rock gets into the machine, preventing serious injury to the cylinder. The teeth of the grinder are 7/8-inch square steel pegs about three inches long, and the compost is crushed rather than cut. Consequently, straw, roots and even the quack grass rootstocks are not broken and will not pass through the screen. It is a decided advantage over the machines with sharper teeth, which have a tendency to cut up all materials. Anything the machine rejects is really unfit for use.

We have recently screened material for a new green with this machine. The peat was dug about two months before using and was simply piled up without composting. It took three good shovelers to feed the machine, and about 60 per cent. went through the screen. This material was a pure sphagnum peat, practically unscreenable without grinding. There was no trace of broken root stocks in the finely sifted peat, although very abundant in the original material.

We are now sifting the clay topsoil taken from the green and traps. Nearly 90 per cent. is delivered and is almost as fine as flour. By using two men shoveling topsoil, one peat and one sand, the green's soil can be delivered ready-mixed at a very decided saving.

A good compost grinder will certainly pay its way on an eighteen-hole course and will deliver a far better top-dressing than can be obtained by hand-screening.

Turf Grasses in Canada

GEO. H. CLARK, *Seed Commissioner, Ottawa, Canada*

Ten years ago there were not more than about a dozen golf courses in Canada. Now, there are said to be more than two hundred, most of which have come into existence since 1918. The problems connected with suitable turf production, particularly for the putting-greens, would seem to be more highly technical than the business and professional men, who are enthusiastic in the work of developing new golf courses, had imagined. Most kinds of grasses look alike to them. The managements of some of these young clubs have been the unsuspecting victims of incompetent golf course "mystagogues" who are able to make a fair success in the arrangement and construction on the course, but who are able to identify grasses only by the name that appears on the invoice.

Perhaps it has been wrong to advise golf clubs in general to buy seed

[2] The machine referred to is that illustrated on page 268 of the September BULLETIN.—EDITORS.