

I Got My Start In Golf Course Construction

By HENRY A. MILLER

Greenkeeper, Barrington Hills Country Club,
Barrington, Illinois

FOR some time prior to taking a position as greenkeeper at the Barrington Hills Country Club, I was engaged in construction work on golf courses under the supervision of Mr. George O'Neil, golf course architect, and also under the direction of Mr. Joe Roseman.

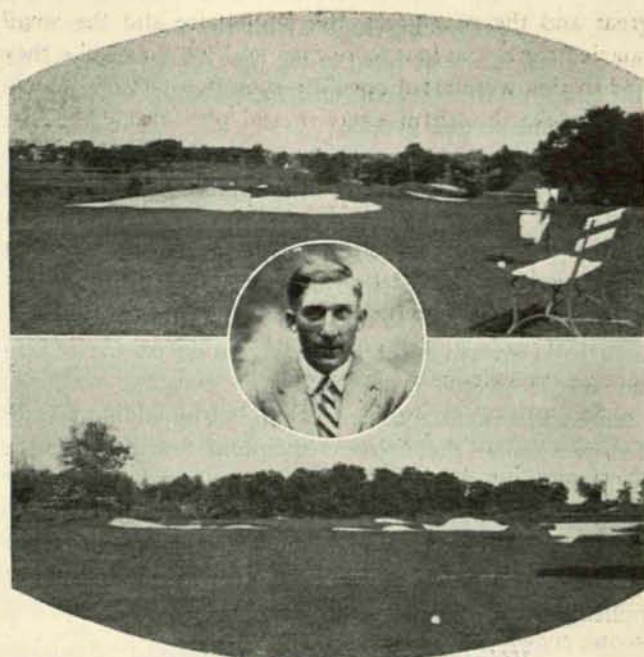
When my chance to become a greenkeeper came to me, I was fortunate in getting a connection with Barrington Hills, and right here I want to say that never since I took up the work for them, has my club failed to keep me supplied with proper equipment and maintenance material with which to give the members a good course to play over.

The lay-out of Barrington Hills is quite elaborate, and gives a greenkeeper a particularly good opportunity to make a showing in his maintenance work. No greenkeeper could fail to do his best on my course because of the kindly and helpful attitude taken by the club officials. If more golf clubs followed out this policy, there would be fewer changes in greenkeepers.

We haven't the best soil in the country, and neither is it the poorest. We never have soggy spots on the course to speak of, as it drains well after heavy rains, as it is nearly all rolling ground. The soil is clay mostly, with here and there some gravel, which had to be heavily covered with top soil when the course was constructed, in order to form a seed bed which would grow grass without its burning out every summer. This clay soil makes fine turf when once established, which will stand a lot of wear and tear. We have some fine fairways now, which are in good condition because of top dressing and fertilizer applied as often as necessary to keep the growth healthy. It takes several years to establish a good fairway, and we find that a mixture of redtop and blue grass does well in this soil.

Drainage Most Important Factor

Any golf course that is not well drained suffers the consequences in wet weather, in heavy rains, and in winter killing of the turf. Drainage is the most important point to consider in constructing a course, and the way our drainage problems were solved will probably be of interest to other greenkeepers. One of the finest ideas that has come to my notice is that of placing catch basins in low spots and ravines that are connected into the main tile and carried off into the lake. These catch basins carry



Two views showing well trapped Greens at Barrington Hills. Center, Henry A. Miller, Greenkeeper

the water off quickly, so that the water does not wash and tear away the surface. They also take care of the surface water that accumulates during heavy rains, and the thawing of the snow in the spring.

Sod Dams and Catch Basins

Another protection we have is sod dams built up very steep swales. These dams are built like a bank off to one side out of the way of play as much as possible, and they are built in such a way that they are easily mowed. These dams save us a lot of washouts, and combined with the catch basins, which have 15-inch openings to the main 15-inch line, give us the best protection possible from accumulated or rapidly moving surface water.

Around the catch basins we have wire screen, two feet high, of half inch mesh, so that leaves and other debris cannot clog the tile. If golf balls hit the wire they glance off, so there is no serious interference with play. We clean away the accumulation of leaves and dirt whenever necessary. Our course being naturally very hilly, it is difficult enough to grow grass and hold it on the hills, without washing to some extent, so without such a system of dams and catch basins, there would be a much higher maintenance expense.

I have had more experience on seeded greens than on those planted by the vegetative method, although we have both. I do not think anyone knows exactly what vegetative bent greens will be like after several years growth, as practically all greenkeepers of experience know more about seeded than vegetative greens, but my experience so far shows that they need a lot of attention in order to maintain a good putting surface. If constant attention is not given them, they make rank growth and a rough surface, grainy and generally unsatisfactory.

Considering everything to do with the maintenance of golf greens, it would seem to me that there is very little difference in the cost of upkeep between vegetatively planted and seeded greens.

Our seeded greens are of redtop and fescue, and on account of the habits of growth of fescue, there is considerable difference between our methods as relating to vegetative bent and seeded greens. Our bent greens have to be brushed up every so often and cut close all the time in order for the grass to make an upright growth, whereas there is always some re-seeding to do on the redtop and fescue greens every year and constant weeding. Fescue will not stand close cutting, but by adding a little seed every year these greens maintain a thick and uniform turf. One very great advantage of vegetative greens is that the grass crowds out practically all weed growth. These greens do not show as quick results from fertilization as fescue and redtop, but will stand stronger applications.

Winter Kill Can Be Prevented

With properly constructed greens, contoured for perfect surface drainage, and well tile drained, we do not suffer from winter kill. If a fairway or green is rushed in construction, and pockets are left on the surface which will not drain during fall and early winter rains, the water freezes on the surface before it can get down through to the drain tile, and the result in the spring is dead spots in the turf in such pockets.

It has been my experience that some cases of winter kill can be partially if not completely prevented by breaking up the cake of ice that has formed over the grass. Especially is this true in cases of sleet storms where the green becomes encased in ice. By the use of a light seeder disc, set so that the knives penetrate to just the depth of the ice, and cross discing in checkerboard squares from two to four inches apart, this will let the air down to the grass plants, and the first thaw will open wider these cuts.

One year after one of these sleet storms, you could skate on some of our greens, and Mr. Hart, my chairman, asked me to do something to prevent winter kill. I had to do some quick thinking and it came to me that perhaps my seeder disc would open it up enough to give the grass plants air. When the ice began to melt in the spring the grass plants growing right under the cuts made by the disc peeped out the first thing, and when the ice went off our greens showed no bad effect from having been under the ice coating for some weeks. Other courses in this district at that time were hit pretty badly.

Labor and Equipment

My method of arranging a working schedule may be different from that used on many courses, and particularly so with reference to cutting the greens. After trying out several ways I finally came to what I call the "piece-work" method, hiring a man to cut six greens a

day for a flat price of \$5. This allows them to start the mowers at daybreak and get through before there is any heavy play over the course. Other labor around the course we get at fifty to fifty-five cents an hour. The number of men varies, according to whether or not there may be changes being made in bunkers or any other new work. Ordinarily we employ from twelve to fifteen men.

One thing I believe is that when a man is given a tractor and mowers to work with, or in fact any other piece of special machinery, he should be kept in charge of that particular outfit, and not changed around with other men and other pieces of equipment. Machinery lasts longer handling it in this way, as a man usually takes a special interest in a machine he uses continuously. We have four Roseman tractors, one Staude and one Worthington, two sets of Roseman mowers and one set of Worthington, which is all satisfactory equipment, which has given good service. We also use the Toro putting green mower, which is in every way satisfactory for mowing greens. I believe that when good equipment is used, the men take more interest, turn out better work, and take better care of their machinery. Cheap equipment makes a good man disgusted, and is a constant drawback to good workmanship.

I try to treat my men with understanding and courtesy at all times, and I have very little difficulty in retaining the services of good workmen from year to year. In other words, I try to pass down to my men the kind of treatment that is given me by the officials of my club, which has had the effect with me to inspire me to do the very best I can for them.

I'll Write Some More! Will You?

A little later on I will write my experiences with Brown Patch and Angeworms, and hope to see other greenkeepers come forward with some articles on how these two pests have been controlled on their courses. I think every greenkeeper, whether or not he knows any other greenkeeper member of the National Association, should lend a helping hand in setting down for this magazine the methods he has found of benefit to him in his work. In time we shall come to know one another better, and when we see experiences printed with pictures of the greenkeepers and of their courses, it is almost like having an introduction to other members. I think this magazine is the finest means possible to bring together in real earnest the men who are contributing their best efforts to create conditions which mean greater enjoyment of the game of golf, and lower scores.

MEMBER GREENKEEPER!

Will you Mail us a story with Pictures not later than March 15?

Write us your suggestions

THE NATIONAL GREENKEEPER