Basic Factors to Be Followed When Constructing Course

By J. M. RETTIG
Superintendent, Elmhurst (Ill.) G. C.

IN GOLF course construction, it is necessary to thoroughly clear the ground, to remove trees that interfere with course design, heavy brush and rocks, and to have your fairways in shape for grading. Only then are you ready to prepare the soil for seed and seeding. In connection with such preparation the fairways should be most completely free from anything which will interfere with the playing of shots. Another point often not considered is the fact that land adjacent to the fairways should, where possible, be prepared to some extent, so that the golfer may recover from wild shots which land outside the fairway. A strip about 50 ft. wide will care for these shots. Grading should next occupy your attention. Plans for all of the grading should be ready and passed upon, so that the working crews may proceed from one end of your course to the other in

Requests for elementary and practical information on golf course construction methods are received frequently by GOLFDOM.

The accompanying tips from J. M. Rettig, veteran constructor and greenkeeper, will be of especial help at the smaller town golf clubs, where experienced first-hand aid may not be available.
TEE MARKERS
Made of Gleaming White
PORCELAIN
Last Forever.

Never tarnish, rust or fade.
Always clean and bright.
Imprinted as desired.

No expense for repairs or upkeep.
Easily moved for daily resetting.
Prompt shipments.

PORCELAIN PRODUCTS, Inc.
Findlay, Ohio

The Silver COMPOST SCREEN

Prepares Top Dressing for Fairways and Putting Greens, satisfactorily and economically. Mixes and screens with one operation.

Furnished with or without power, as ordered. $190.00 without power—$295.00 with power, either electric motor or gasoline engine.

Send for circulars.

THE SILVER MFG. CO.
707 South Ellsworth Avenue
SALEM, OHIO

a sweeping advance. It should not be a question of going from No. 1 to No. 2 and so on. It should rather be a program that takes in the construction of adjacent greens, fairways and hazards, and moves steadily across the property. In doing this see that a loop of nine holes may be played before the balance are ready.

Pipe line for water should be placed with the grading advance, and any planting of trees or shrubs be done after completion of the water lines when water is obtainable. All grading which includes the making of tees, fairway rolls, hazards, greens and necessary drainage, must be entirely finished before seeding any unit.

Roads for service through the grounds are very important, and these and foot bridges, and any other bridges must be built. Those used during construction should be planned to serve when the course is in play.

Install Hazards Early

In years past many hazards were made after the fairway was in grass, the theory being that they were often misplaced otherwise, and that the course should be tried before their final positions were chosen. Nowadays, it is found more desirable, for many reasons, to do grading, including trapping, before seeding. First; it is a finished and not a patched job and the drainage is more easily mapped as a whole, if done at one time. Sand may be placed on the ground as the hazards are built, as it is not necessary to bring it in afterwards. Most important of all, the new fairways will not be out up, bruised and soiled by tramping of teams and the dragging of implements across them if hazards are made before seeding.

If alternate tees have been provided, and optional hazards with open fairways for the short player arranged, hazards will seldom be wrongly placed. It is much easier to fill up a hazard, or part of a hazard, and call it ground under repair, than to construct new hazards. When you come to seeding your course you have a lot of different varieties of grass seed to select from and by considering soil and climatic conditions and the recommendations of an established and responsible golf seed house you can not go wrong.

In preparing seed bed for fairways after the ground is ploughed use a spike harrow and roller, or drag many times until there is a fine mellow layer at least two or three inches deep. Make sure there are no hol-
lows or sharp ridges, as these would interfere with mowing after the grass is up.

Fairway and Green Sowing

Best results in grass sowing are obtained by using the wheelbarrow type of seeder, sowing half of the seed lengthwise of the fairway and then sowing the other half crossways of the fairway. After this is done, use a very light smoothing harrow with the teeth slanting well backward, then finish off with a light roller.

In preparing the seed bed for greens, the top six inches of a putting green surface should be composed of a good sandy loam, and at least two inches of this top should be put through a dirt shredder or a half-inch mesh screen so as to eliminate all rocks or roots. Thus it is possible to obtain a very smooth finished surface. The preparation of a putting green seed bed is the same whether seed is to be sown or bent stolons to be planted. If seed is to be sown, it should be raked in very lightly and then rolled with light roller. It is then ready for watering, which should be done with a fine nozzle hand sprinkler, until the grass is well established.

When the grass is about three weeks old, it is time to topdress. If soil conditions are average for the central states take fertilizer spreader and give the green (if average size) about 30 lbs. of lime. Then mix a topdressing of one-third loam, one-third sand, one-third peat. This can be applied about one-quarter of an inch every two weeks until a very even putting surface has been established. This mixture not only trues up the putting surface, but it absorbs water readily and will not bake, thereby making an ideal surface to hold a pitch shot.

Preserve Your Topsoil

In moving earth, extreme care must be used to finish the green with topsoil, not sub-soil, even if you are going to add other soil to secure a proper seed bed. This also applies to tees. Tees will cause trouble if the lines which orient them to the player do not point in the direction of the tee shot. Before tees were made part of the fairway, and when their shapes were square and not suited to the surrounding terrain, it was the custom to place them by the use of a large "T" square, so that their straight sidelines pointed properly.