

Many clubs use corrosive sublimate during the fall months for eradication of earthworms. Where this has been done late in October there will be no need for additional treatment for snow-mold control. Since we do not know whether the 2-ounce treatment will be sufficient under all conditions, we suggest that part of one or more greens be treated with the 1-ounce and 3-ounce rates. This will serve as a guide for future applications. The chemical may be applied in a solution by means of a sprayer or sprinkling can, or it may be distributed with small amounts of sand or compost and thoroughly watered in.

It is to be expected that calomel or the chlorophenol mercury compounds, Uspulun and Semesan, will prove equally effective against this disease, if used in equivalent amounts (10 ounces of Semesan or Uspulun is equivalent to the 2-ounce treatment of corrosive sublimate or calomel). However, since corrosive sublimate at these rates is not dangerous to use on turf during cooler weather, and since it is so generally used for earthworm eradication, there apparently is no object in using the more expensive chemicals.

In applying corrosive sublimate it should be remembered that it is for the control of snow-mold disease and not for all types of winter injury. The differences between this disease and "winter kill" have been pointed out in the April BULLETIN. For this latter type of winter injury, applications of chemicals are worthless.

Golf Course Architecture and Construction

Analysis of Layout

By William S. Flynn

While there is no rule as to the number of the various types of holes to be incorporated in an eighteen-hole layout yet there are certain customs that most architects follow.

In fact these customs have been handed down from the forefathers of golf and like many other things that have come down through the ages they have their value.

The rule most generally adhered to is to have four holes of the course one-shotters. To the majority of golfers the one-shot holes are the most interesting and there is no real reason why there should not be five one-shotters particularly when such holes provide interest in the play and are of varying character.

On the other hand a course with three outstanding one-shotters is much more desirable than one with four mediocre ones.

It was also formerly thought that each course should have a three-shotter in each nine. Today however, the thought prevails that one good three-shotter is sufficient unless some outstanding natural feature warrants putting in a second.

Good three-shotters are the exception rather than the rule and unless the player has a specific thing to do on each shot other than slug, this type of hole becomes monotonous.

The principal consideration of the architect is to design his course in such a way as to hold the interest of the player from the first tee to the last green and to present the problems of the various holes in such a way that they register in the player's mind as he stands on the tee or on the fairway for the shot to the green.

The best way to whet the appetite and improve the game of any golfer is to offer an incentive and provide a reward for high class play, and by high class play is meant simply the best of which each individual is capable.

Placing a premium on accuracy with due consideration for length should be the aim of all men who design golf courses, for accuracy in the play signifies skill and skill is generally the master of brute force.

It is impossible in considering types of holes for a course to suggest any positive sequence of alignment for each layout should be designed to fit the particular ground on which it lies, although anything at all can be done with ground that is dead level and there are places in this broad land where clubs are compelled to use such terrain.

Flat ground has its disadvantages but it is the only ground that permits laying out holes where the sequence and lengths can be planned arbitrarily.

In discussing types of holes it is perhaps better to consider the question from the competitive or tournament play standpoint rather than from the everyday play, because in this connection only par golf is involved.

In fitting the course to all classes in everyday play it is necessary to maintain relative values in the holes. This can only be done by using two and in some instances three tees to a hole the various players using the tee that fits their particular game.

The value of a hole is immediately lost when the 200-yard driver uses the back tee on a normal 420-yard hole. It is impossible for him to get home in two, whereas had the forward tee 40 to 50 yards ahead been used he would then have played a long iron or spoon shot to the green with a resultant thrill of satisfaction and at the same time be within his limitations.

A great many players are averse to using forward tees perhaps because they were originally christened "ladies tees" but regardless of that fact it seems that a great deal more enjoyment could be had if golfers used the tee on the various holes that really suited their game.

A little card tacked on their locker door with the following inscription might go a long way toward correcting their prejudice against the so-called "ladies tees."

GOLFERS, ATTENTION!

"In order to accommodate all classes of players your club has gone to the expense of building forward, intermediate and back tees on many holes. These tees are kept in order and markers are placed on each one. Except in tournaments please use the tee that fits your particular game and enjoy the course."

What holes should go to make up the average good course of today? The term average good course is used because it doesn't seem possible that any club will ever be in a position to build a course that might be considered ideal, a superb test of golf, because there are so many conflicting opinions in the average membership. The frame work of the course may be wonderful but its unfinished condition in regard to development of bunkering or scheme of play removes it a certain degree from the ideal.

The United States Golf Association might develop, sponsor and subsidize sectional courses, say six in all, which could be used for all major championships and which could be developed to the nth degree.

Should these courses be operated on a membership basis it would be understood that the conduct of the course would be entirely under the jurisdiction of the national Golf Association.

The above courses could be developed by arrangement with existing clubs or could be built entirely new, the latter perhaps being the better plan.

In this way it would be possible for the best architects collaborating with the Golf Association to develop these courses and thus establish a standard from which other clubs might profit.

Under this arrangement it would also be possible to modify or improve each course for any condition that might come up in relation to the development of the game such as the ball question or other important factors that might have a bearing on the case without creating controversy among the members.

Experiments supervised by the United States Golf Association Green Section might be carried on under actual playing conditions and the experience gained distributed to the member clubs.

In a measure this would eliminate the misnomer "championship course" as used at present. There would actually be six championship courses and not the great number that are now so-called perhaps by an overzealous architect or enthusiastic members.*

Getting back to the average good course it does seem that from 6,200 to 6,600 yards should suffice for length.

Dividing this up into holes there would be say four short holes ranging from the mashie to the full wood shot.

One real three-shotter not merely a hole somewhere over 500 yards.

Two drive and full wood shot holes, one with a big carry on the drive as the premium with an easy entrance to the green, the other with accuracy on the drive but with the premium on a big carry for the second shot.

One drive and high spoon shot, accuracy off tee and carry to the green.

One drive and full cleek shot to narrow entrance and slightly terraced green.

One drive and high midiron carry to green.

Two drive and full midiron run to green with narrow entrance.

One drive and high mashie iron carry to green.

One drive and mashie to narrow entrance.

One drive and mashie all carry to green.

One drive and mashie niblic to island green.

One drive and run up on narrow terraced green straight way.

One drive and runup, elbow or cape type with premium on length of drive.

The above list is not at all arbitrary but covers generally the possibilities in an eighteen-hole layout.

With the exception of the short holes, assuming four to the layout, a golf course consists of 14 drives plus the par second and third shots and the object should be to provide holes of proper length to accommodate the more important clubs after the drive has been made.

* The above suggestion by Mr. Flynn is interesting and well worth consideration. The United States Golf Association has not at present any such scheme in view, but it has been informally discussed by members of the Executive Committee as individuals.

It naturally follows if this play is carried out that holes of character and variety can be had.

The problems which should be developed on the various holes in the order of their importance are first—accuracy; second—carry; third—length, which includes carry and roll.

The premium on accuracy should carry the greatest reward for this is the essence of any game.

Carry while slightly less valuable than accuracy is important in that it promotes boldness.

Length may be considered least important but this becomes quite a factor when a player is able to mould all three tests together.

In applying these problems or tests to the layout through the medium of bunkers the architect has a great opportunity to display versatility. On one hole he may have a big diagonal bunker off the tee where the player takes as much risk as he feels capable of carrying and is rewarded in his shot to the green commensurably with his first effort.

He may have a comparatively easy drive off another tee, and yet, if the ball strays slightly from the center of the fairway, his second shot to the green becomes increasingly hard.

By arranging the green bunkers in such a way as to invite play in from one side or the other he can also put a premium on placing the tee shot on the proper side of the fairway. When a test of length off the tee is presented the best type is the cape or elbow where it takes a really big tee shot past a corner to permit reaching the green in par.

The problems may be diversified using one test off the tee on one hole, the same on the second shot of another hole; sometimes two of the same kind on the first and second shots of a hole; perhaps all tests, accuracy, carry and length on another but always juggling so as not to get sameness on succeeding holes.

While bunkers are thought by many to be put in as penalizers they are primarily installed to present a problem or a mode of play. If bunkers were used merely to punish bad shots there would have to be a complete revision of them on most courses.

The worst shots in golf are generally bad tops and wide hooks or slices and the player generally has sufficient penalty in these weaknesses, particularly when greens are properly protected.

America has developed a more or less stereotyped shot to the green that is the high all carry shot. This has been brought about no doubt by the fact that fairways and particularly approaches have gone unwatered during the summer when the ground has become hard. It is much simpler to play a high carry shot to a soft green which gets water than to attempt a pitch and run to a green with a cement like approach.

In the first case when all greens are watered a constant condition prevails but in the case of the runup approach the ball hits and is liable to bounce anywhere.

In order to cultivate the pitch and run, the runup shot and the long iron or wood with run it is necessary to present a suitable playing condition on the approach and this can best be brought about by the architect insisting on a water system for fairways and by the greenkeeper making generous use of it.

Natural topographical features should always be developed in presenting problems in the play. As a matter of fact such features are much more to be desired than man made tests for they are generally much more attractive.

One natural hazard, however, which is more or less of a nuisance is water. This is not nearly as bad when it parallels play and forms a picturesque landscape feature of the course. But when water is between the objective (the green or driving area) and the player it may be that the man who plays only a foot short of the objective is much worse off than the one who makes a very poor shot that does not reach the water.

In the first place the player is penalized a stroke with no chance of recovering it whereas the second player having played a worse shot gets by without penalty and may regain lost ground with a fine second shot.

Water hazards absolutely prohibit the recovery shot, perhaps the best shot in the game. On the other hand how valuable these streams are when the greens and fairways need water.

Topdressing

By H. Kendall Read

Good putting greens can not be expected without proper topdressing. Moreover, you will not get the best results from fertilizers or treatments unless they are properly applied. It is very apparent that some clubs are not using the best methods. I am referring simply to the method of making the application and I do not refer to the mixing or preparation.

There are two common errors: 1. The dressing is applied too thick. 2. If the proper amount is used, it is not thoroughly worked down to the roots. In either case the green is left in an unsatisfactory condition and remains so for days. The Greenkeeper and Chairman are both condemned for something which could easily be avoided by a little care. I believe it is better to use an under amount than an over amount of topdressing at one time. There is no difficulty in making a fairly even distribution over the green, the most common error is not thoroughly working it in.

A very effective tool for this purpose is a home-made board scraper. I do not say it is the only tool to use but I do know it gives quick and most satisfying results. It is easily made by attaching a handle to a board about 2 feet long, 4 inches wide and 1 inch in thickness. The bottom edge should be beveled so that when the scraper is held in proper position, the lower edge is even with the ground. With scrapers of this character, the topdressing can be pushed and pulled until it practically disappears. Any material which can not be worked in, out of sight, is pushed off the green altogether and used on the approach area or elsewhere.

If a green is properly topdressed with an amount of material which is not excessive, most players would not know it had been touched and in most cases it should actually putt better immediately afterward than it did before. Careless topdressing not only causes discomfort, but frequently does actual harm by smothering the grass.

With a lot of penal bunkers staring one in the face from the tee, there is no mystery—only misery.