

# Course For "Typical Golfer"

## Popular at Pinehurst

One of the most talked-about new courses in the United States is the 9-hole No. 4 course at Pinehurst, N.C. This isn't a championship course nor is it spotted with the punishing sand traps that make other Pinehurst courses, No. 2, especially, exacting tests of golf. There isn't a sand trap on Pinehurst's No. 4, although there are sandy areas bordering some fairways that provide some sand shots.

It's the absence of sand traps around the greens or to catch misplaced tee shots that is one of the main distinguishing features of this No. 2 layout which now is in its second season. Yet, without sand the course is testing enough for about 95% of American golfers. The grassy hollows strategically located to guard greens provide shots that are just as difficult as sand trap shots for the average golfer, and harder for the expert who has mastered the wedge so a trap shot near a green usually is not much more of a problem than a long putt.

The maintenance of the course without sand traps is reduced considerably.

There are two factors that immediately occur as objections to a course without sand traps. One is that all of the leading private club courses and most of the public and semi-public courses have sand-traps so a player coming from a course without this feature doesn't know how to play a required shot. The other is that if the grass in the sandless traps isn't Bermuda (as at Pinehurst) the grass may get so thick and long it is an unfair hazard.

The first objection might be answered by sand trapping on short holes of the otherwise sandless course, or by having a practice sandtrap.

The grass objection would have to be answered by selection of grass to seed in the traps or by trap design that would permit machine rough mowing.

But, as far as Pinehurst is concerned, the popularity of the No. 4 course indicates that there's certain to be more attention paid to designing and constructing courses that have no sand traps.

### Short But Testing

The No. 4 course is short. It's only 2,732 yds., with a par of 35. The yardage by holes: 355-157-439-337-96-356-296-326-367. The 439 third is on the card as a par 5. Bogey is 41 for the course.

Despite the shortness of the course it

gets a lot of play from the younger golfers who come to the American version of Scotland's St. Andrews. Eighteen holes on one of the tougher Pinehurst courses and 6 on No. 4 make a great day's golf for anyone. The stronger players—even the experts—confirm Horton Smith's observation after playing several rounds on No. 4 that it is a very pleasant, interesting and tightly exacting place for appraising one's iron game.

### Design Features Outlined

The design features of Pinehurst No. 4 are related by Richard S. Tufts, Pinehurst pres., who laid out the course.

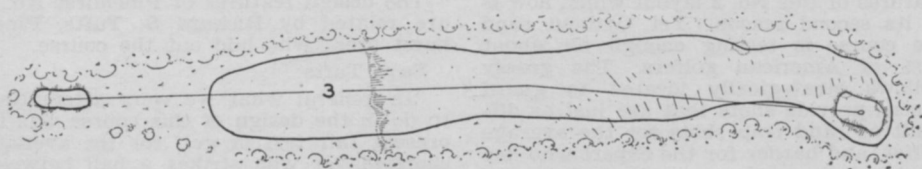
Says Tufts:

"In general what we were attempting to do in the design of this course was to present fair test of golf for the average short player who strikes a ball between 170 and up to perhaps 200 yds., and to at the same time make the course as difficult as possible for the golfer who can hit a tee shot between 190 and 250 yds. Therefore the course was made open at the shorter distances and as tight as possible at the longer distances.

"We also presumed the shorter player did not have the power to play a high shot to the green with sufficient spin on the ball to cause it to stop quickly. We therefore left all the approaches open so that a running ball could be played to the green. In a few cases the approach was complicated by the introduction of hollows or mounds, but we always left an opportunity for the golfer to play a spoon or a long iron to a green 140 to 160 yds. away. At the same time we tried to make the green tight enough so the golfer who was playing an eight iron to the green would have to be just as accurate as if the green were heavily trapped.

"The third feature was the complete absence of traps and the use of rough or mounds as a substitute. We felt the weaker player was not an expert with the wedge and did not wish to place him at any disadvantage by requiring him to use it. We felt that the contouring around the green would make the shot interesting enough for all types of golfers who did not succeed in getting on the green in their approach shots. The second reason for the elimination of bunkers was the cost of their maintenance.

"Following is a brief description of the



View above is from a spot about 180 yds. in front of the tee on the third hole of Pinehurst's new No. 4 course.

four holes shown by accompanying plans and photographs:

"Third hole: This is the only hole classified as par 5, even though it is under the standard length. The ground in front of the tee is approximately level for about 170 yds., when it drops away on a long slope to about 270 yds. from the tee. The photograph was taken at a point about 180 yds. from the tee. The hole is designed to be played in three shots by the average player. The first to the position shown in the illustration, the second down short of the green, and the third a little chip shot from approximately the position marked with a "B" on the plan. From this position there is a general slope of the ground from right to left, but the left side of the green is so built up that a ball can be run directly up the slope without taking much break. This is therefore not too difficult a par 5 for the short player, and he always has the chance for a chip and a putt.

#### **Tougher for Long Player**

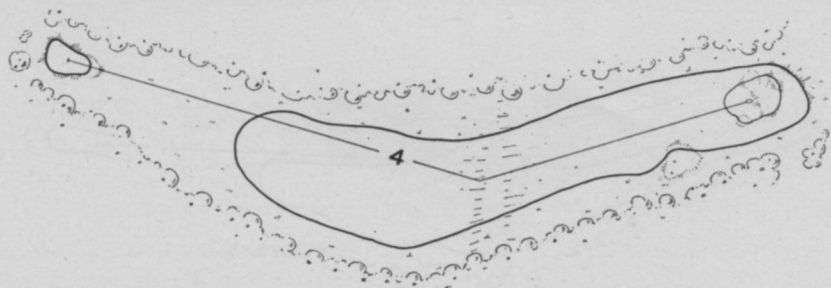
"The long player will drive to the position marked with an "A" on the plan, or a little short of this position. This gives him a blind tee shot to a fairway that is narrowing sharply and at the same time sloping from left to right. It is therefore a much more difficult tee shot than the

shorter player is required to make. From position "A", the longer player if he wishes to come home in two, has to make a shot of 180 yds. or longer across some intervening rough to a small green. Both these shots are far more exacting than the shorter player is required to make and this should therefore be an interesting hole for all types of players.

"The plan and photographs show the hole clearly except that the general slope of the ground around the green is not indicated.

"Fourth hole: Tee shot on this hole is up a gentle rise to a point about 180 yds. from the tee. From this point it is level to the green, the green being situated on a sort of knob beyond which the ground falls sharply away and also there is quite a drop on the left side of the green.

"The short player has ample room in which to play, but because of the elbow anyone striking the ball beyond 200 yds. has an extremely difficult narrow opening into which to play and must take into account the elbow feature of the whole hole. The approach to the green is open and level and the only problem is presented when the player goes either to the left or the right or over the green, in which case there is quite a difficult chip shot back to the green.



Another view taken from position of the tee shot on the par 4 fourth hole of the new course.

"From the standpoint of the long driver the feature of this hole is the very difficult tee shot. The photographs of this hole do not show the green as well as I would wish.

"Seventh Hole: This hole is the shortest of the par 4 holes. The hole plays very much like the fourth hole except that it gives the opportunity for a really short chip shot to the poor player. The back of this green is built up considerably and is quite a penalty for being bold. Unfortunately, we designed this hole to bend around the pine tree shown in the photograph and this pine tree was killed by lightning last summer. I had forgotten this fact when I had the pictures taken of this hole, and the dead tree is not very decorative.

"I would have liked to photograph this hole from the tee, but there is no chance at all to see the green from this position.

"Eighth Hole: This hole crosses a valley, the tee shot striking into a slight hill, the crest of which is about 180 yards from the tee. It is quite difficult to see the green very much short of this position. One of the features of this hole is the little hollow in front of the green, which has to be carried in a high approach shot

to the green. On the other hand, a low ball runs through this hollow without difficulty and onto the green. The photograph was taken from a position nearer the green than even a long driver would be likely to reach, but it was necessary to get this close in order to show the hollow in front of the green.

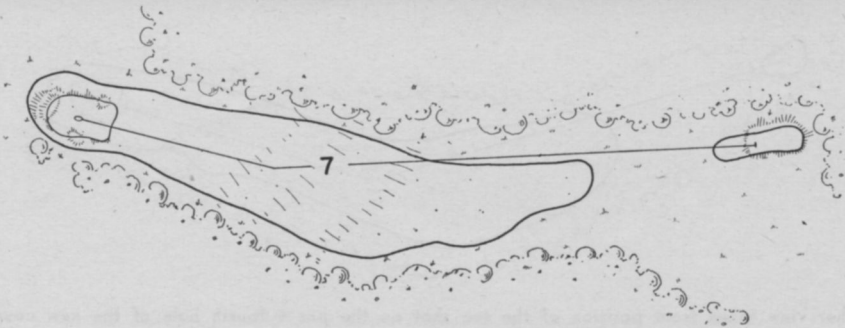
"Again you will observe the fairway becomes narrower for the long player. However, comparatively speaking, this is a much easier hole for the long player than either No. 4 or No. 7.

"The plans for the four holes are all drawn carefully to scale, and you would be safe in taking any measurements from them."

#### Maples Describes Construction

The construction of the course, which adjoins the famed No. 2, scene of the 1951 Ryder Cup matches, and the North and South Open, is described by Henson E. Maples, supt. of the Pinehurst courses. Maples says:

"For some time it had been felt that there was a need for a course that was short and relatively easy, designed for the average golfer and stressing maintenance economy. On April 14, 1950 I received word from Richard S. Tufts to arrange for



This is the seventh hole, a short par 4, from a position directly in front of the tee.

constructing the new course. It had previously been decided that we would use part of the old 18 hole No. 4 sand-green course, which had been closed for about 17 years.

"Plans were drawn up for the nine holes and each hole was staked out on the ground showing the location of tees and greens, as well as the outlines of fairways which were planned wider at about 150 and 300 yards for the short player and narrower between these distances to make it tighter for the long player. Total length was planned to be between 2700 and 2800 yards with two par 3's of approximately 100 and 155 yds., one par 5 about 440 yds., and six par 6's ranging from 295 to 370 yds.

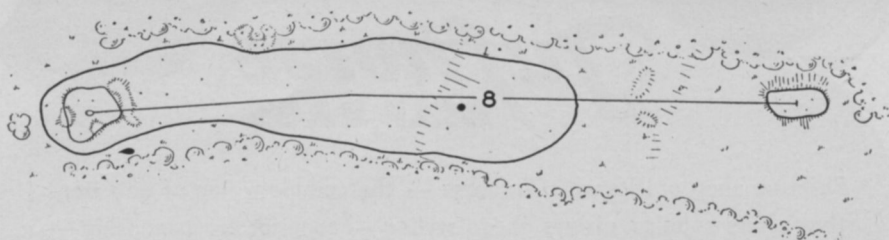
"Work was begun on May 3 with our regular crew of about 18 men and was on a part time basis until Nos. 2 and 3 courses were closed on May 14 and May 27 respectively. All of the clearing was done by hand since for the most part it consisted of a very thick stand of young long leaf pines that had grown up voluntarily during the past 17 years and were too small to be taken out with heavy equipment without destroying topsoil and possibly tearing up ground. All areas to be

planted were burned to get rid of the waist high growth of broom sedge and other weeds so the soil would be cleaner to work later, to kill weed seeds, and provide a small amount of potash.

"After clearing, the soil was thoroughly pulverized by plowing and discing several times with Ford tractors. Then it was harrowed several times in every possible direction with a spike tooth harrow to smooth and also bring to the surface some of the numerous pine roots, which were removed as the work progressed. The furrows were cut down with blades attached to the Fords and a 12 ft. wide drag made from a 4 in. x 4 in. with a piece of flat iron on the front edge was used to float the surface smooth.

#### Fertilizing and Seeding

"One ton of dolomitic pulverized ground limestone and 1000 lbs. 5-10-5 commercial fertilizer per acre were then applied to all fairways, tees and walks. On June 3 seeding was completed using 15 lbs. hulled bermuda seed per acre, mixed with Mil-organite, sowed with the Cyclone seed sower in two directions and then harrowed thoroughly about 1 in. deep. All loose surface material was raked off and the



The green on the eighth hole comes into view from a distance out about 60 yds. Note small hollow in front of the green.

final smoothing was done with a drag made of 2x6's overlapping, and in two sections hinged together so it would follow contours.

"After a light rain on June 4, all seeded areas were rolled with a 3-gang tractor roller, and after two more showers on June 9 and 10 germination was noticed. On June 13, 700 lbs. Milorganite per acre was applied and on July 1 all seeded areas were rolled and mowed for the first time. On July 7 spiking was done with a Rotary hoe, 1000 lbs. Milorganite per acre applied and then rolled. Dolomitic ground limestone was applied again on July 25 at  $\frac{3}{4}$  ton per acre and on the 27th 800 lbs. Milorganite per acre. Again spiking and rolling was done. An attack of fall Army and cut worms made it necessary to poison on August 25. Two gallons of 50% Chlordane per acre was used and gave excellent results.

#### Greens Construction

"The last fertilizing was made on August 31 using 700 lbs. Milorganite per acre. The fairway grass was in wonderful condition by fall even though rainfall was below normal, and all the grass came back good in 1951.

"In constructing the greens, grading was done with two Ford tractors on four

greens where there was a need for it. The other five, as well as all tees, were built by hauling in soil with dump trucks which were loaded with a 1 yd. capacity trax-cavator. Approximately 2,000 yards were hauled at a cost of 54 cents per yard. Since no traps were being used, it was necessary to elevate most of the greens, at least at some point, so they would show up better as a target. No sub drainage work had to be done since all of the soil on the course is sandy and drains freely. However, in grading the greens, care was taken to see that each had surface drainage in at least two directions.

"The soil hauled in was roughly scattered with a blade on the front end of a Co-op tractor, then smoothed down with a spike-tooth harrow. A Ford tractor with pan was used to move soil as needed in forming contours. For the final contouring I drove the tractor pulling the 12 ft. drag and directed the man handling it so that I would get each green exactly as I wanted it in the least possible time. This operation took about two hours per green.

"On June 19 all greens and approaches had 1500 lbs. of 5-10-5 fertilizer and 1 ton dolomitic ground limestone per acre. Planting was begun using stolons of the

*(Continued on page 91)*

Weeping Willows in the swales, I have found several of the tiles are stopping, on account of roots. When we find this we take them up and put in sewer tile with tarred bells, past the root system of trees, to keep them open.

On these courses we pump our water from a 9 acre lake.

During this past summer we had to pump water from our deep well at around 300 to 400 gallons per minute, 24 hours per day, for 90 days to hold the level of the lake, as high as we could. With all this pumping the level dropped around five feet. This was on account of the very dry summer.

We had around 70 to 75 days with hardly a trace of rain.

Having to use this lake water on our course was quite different from using the 55 degree water on the other courses. Poa annua on this course is quite a pest and causes plenty of headaches. I believe that if I had 55 degree water to use on this course a lot of the poa annua could be saved.

Since we don't have that kind of water we are, and have been for the last three seasons, aerating our greens, tees and fairways. On our fairways, we are converting them as quickly as possible to Highland bent. I believe that rather than worry and try to keep poa annua on our courses, the best plan would be to convert the fairways to one of the better strains of bent. This will take time but some of the fairways out there were sown originally to Highland bent and creeping red fescue and poa annua is no problem on them.

## COURSE FOR TYPICAL GOLFER

(Continued from page 48)

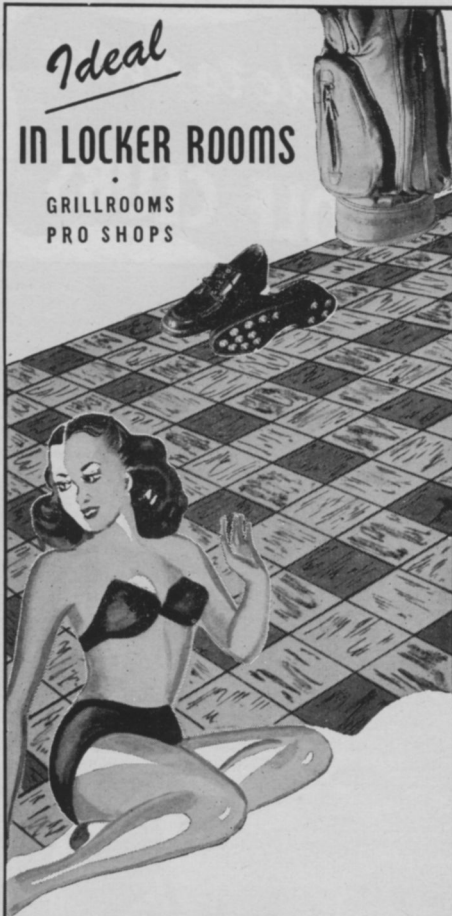
Pinehurst strain of fine bermuda for the greens and regular bermuda for the approaches. Hand garden plows were used to plow furrows into which the stolons were placed and then covered when the next furrow was plowed. Planting the greens was completed on June 21 and the approaches on July 6. These areas received 1000 lbs. of 5-10-5 fertilizer per acre on July 12, and were then spiked with a rotary hoe, raked by hand to smooth and rolled. Lime was again applied on July 25 at  $\frac{3}{4}$  tons per acre and Milorganite on July 27 at 800 lbs. per acre. On August 15 800 lbs. of 5-10-5 per acre was applied and then the greens were topdressed heavy and the soil worked in with scrape boards to smooth the surface. Spiking was done on August 22 and on August 31 Milorganite applied at 700 lbs. per acre. The final topsoiling for smoothing was done on November 29 and 30 before seeding the rye.

"Due to the late shipment of pipe for

*Ideal*

## IN LOCKER ROOMS

GRILLROOMS  
PRO SHOPS



## DO-ALL

### CORDED RUBBER FLOOR TILE

Made specifically to stand up under spikes and cleats

Thousands of feet now installed in clubs everywhere, giving highly satisfactory service. Especially tough, long wearing rubber and cord construction cushions every step. Subdues noise. Slip-proof even with spikes. Four colors. Comes in 9" and 30" squares. 1/8", 3/16", 1/4" thicknesses. Write today for literature and surprisingly low prices.

---

**AMERICAN MAT CORPORATION**  
"America's Largest Matting Specialists"  
1802 Adams Street Toledo 2, Ohio

( ) Please send literature and prices on Do-All Corded Rubber Floor Tile.  
( ) Please have salesman call, without obligation.

NAME \_\_\_\_\_

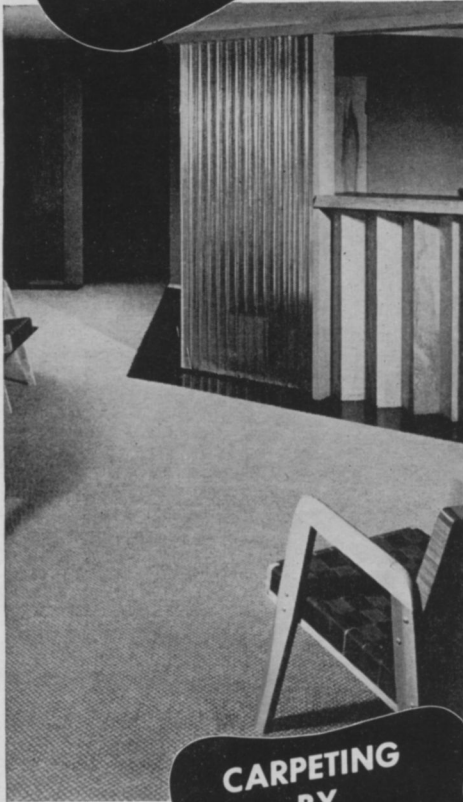
NAME OF CLUB \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY & STATE \_\_\_\_\_

In Canada, AMERICAN MAT CORP., LTD.  
Canada Trust Bldg., Windsor, Ontario

Made to order  
FOR  
GOLF CLUBS



CARPETING  
BY  
KLEARFLAX

Tightly woven  
of long-wearing  
virgin flax, scuff-  
proof, beautiful in any room. Reversible, spike-  
resisting, moth-proof, practically burn-proof,  
and easy to clean. Adds distinction to any  
interior. For address of nearest dealer write:

**KLEARFLAX** CARPETS  
AND RUGS, DEPARTMENT G.,  
DULUTH 7, MINNESOTA

the water system no watering was done until the middle of September when the installation was completed. In spite of this and the below normal rainfall all the greens came through good except for No. 9 which had to be replanted. This green is on a sand hill and gets the full effect from both sun and wind. Ditches for the pipe were first plowed with a two horse plow pulled by a tractor and then cleaned out by hand shoveling. Refilling was done entirely by labor except for packing which was done by tractor. Four greens and tees were supplied with water by running pipe from nearby lines on the other courses. The other 5 greens and tees were supplied from a new 4 in. line with laterals extending out to them. The 4 in. line was 1,414 ft. long and 2,598 ft. of other pipe from 1¼ in. to 2½ in. was used. Skinner valves were installed in the tees for snap-in sprinklers and 1 valve was located at each green to be supplemented with a 50 ft. length of 1 in. hose with roller sprinkler.

#### Total Cost, \$8,917.30

"Total cost for construction was \$8,917.30. This included cleaning the roughs and immediate woods areas during the winter of 1950, as well as the supplies necessary to open the course. The water line cost was \$3,704.82. Although not measured, there are about 18 acres in turf.

"The course was designed for the average golfer—to be easy and still provide interesting golf. Many favorable comments have been received from people who have played it. Maintenance expense was reduced to the minimum by the elimination of sand traps and of hand mowing except on the greens."

#### MANAGERS 25th CONV.

(Continued from page 62)

cally no difficulty in getting all the members to accept uniform, but quality, service on a simple basis.

#### DeLuxe Club Saves Money

The manager of one of the most famous and exclusive midwestern country clubs told of all members being required to make lunch reservations before 10 a.m. and dinner reservations before 4 p.m. There are no menus, but buffets of two to four main items. It took the house committee about six months to train the members to get accustomed to club meal service on the general basis of that at a gold coast home but now all members like the system. The system accounted for changing from a \$24,000 annual house loss to a \$10,000 profit on \$80,000 gross business.

Pension plans again were discussed. The

Golfdom