



"Alert" has been sounded and these two English golfers waste no time taking to the shelter on the course of the Richmond (Surrey) G.C. In competitions, during gunfire or while bombs are falling, players may take cover without penalty for ceasing play.

a fair-sized towel factory would have in stock.

Press accommodations were very good and the press was handled by the committee, officials and policemen at clubhouse entrances, just as though the newspaper men were white people and guests of Texas gentlemen. The frequent procedure of being stopped at the main highway and being compelled to convince guardians that the bearers of the USGA press credentials did not intend to burn the clubhouse, betray the waitresses and blow the safe containing the gate money, was not followed.

There was a large air-conditioning fan in the press tent, set so its blast wouldn't blow copy paper into the Gulf of Mexico. Water, Coca Cola and beer was provided. A few electric lights might have been placed over the scoreboard for the late workers, otherwise arrangements were perfect.

Press headquarters also were provided in a large room in a downtown hotel, with typewriters and wire operators present for those desiring to file overnight material or other late stuff, and for the relaxation of those pressmen desiring to chin with each other or to test the profit possibilities of a deck of cards.

Fort Worth, being two hours behind Eastern time and an hour behind Central time, presented the same problem of making editions newspapermen from farther east had when the Open was played at Denver in 1938. This makes it advisable

for the USGA to give leaders at the half-way mark early starting times for Saturday play.

A great entertainment feature for visiting golf notables and pressmen was the dinner put on by Amon Carter, widely known Fort Worth publisher and capitalist at his Shady Oaks ranch. Tom Carvey, manager of the Fort Worth club, managed the catering for this event as he does for the other famous parties Carter gives at his ranch. Carvey provided ranch grub of superb rating. He also served with noteworthy satisfaction to them, a number of nationally prominent visitors who made their home at the Fort Worth club during the Open.

Publicity on the Open was splendidly handled by the committee in charge. The official program was one of the classiest ever put out for a national golf championship. It contained no advertising. In addition to excellent golf material in copy and illustration, it contained a fine souvenir feature, "Fort Worth in Pictures."

Fort Worth newspapers got out souvenir editions on the Open. At the top of each inside page of these editions was a diagram of a hole of the Colonial course.

Down-town store window trims featured the golf motif during the week that closed with the Open.

National Distillers and Hiram Walker had special golf window trims in liquor stores around the time of the Open.

# New Greens—Heavy Play— Drought—Clover —But We Licked 'Em All

By **WILBUR STONE**

*Greenkeeper, Mark Twain Community GCse, Elmira, N. Y.*

As Told to

**BART J. SCANLON**

**W**HEN I came to the new Mark Twain Community Golf Course in the spring of 1939, work on the first 9 holes had been completed. Official opening of this first 9 was set for May 27.

The greens on the new course averaged 7,000 sq. ft. in size. They were planted with Washington strain creeping bent and by that time had gone through two winters. They were in excellent shape except that they



Wilbur Stone

needed additional seasoning. After they had been mowed, with the mower adjusted to 5/16 in., and were topdressed and rolled, the greens were as solid and smooth as a billiard table.

It usually requires at least 6 years to bring

new greens to tip-top playing condition. We would have had no trouble with the greens, during the first season of play, except for the fact it was one of the driest summers in history in southern New York.

As the drought continued, I sprinkled the greens for as much as four hours each night. About this time, I noticed that some clover had begun to appear in all the greens.

About July 1, to satisfy the demand of the players for still faster greens I started mowing with the mower set to  $\frac{3}{4}$  in. instead of 5/16 in. Instead of getting rid of the clover, it began to appear in increased amounts on all 9 greens.

It seems to me now that the explanation lay in the fact that cutting greens too close during a dry spell results in stimulating the growth of clover. This is due to the fact that clover takes nitro-

gen from the air and manufactures it in a nodule in its roots. I am now convinced that close cutting reduces the power of grass to obtain nitrogen without affecting the clover.

But to go on with the story of that first summer. By August, all the greens were extremely hard and fast. But since 40% of each green surface was clover, it was difficult for a ball to roll true. I decided to raise my mower and resume cutting the greens with the blade set at 5/16 in. The drought continued right through into September, with only an occasional light shower which hardly moistened the parched grass. But I noted that the clover's rate of growth had been slowed down.

In late September, I went over all the greens thoroughly with a spike roller and covered them with a topdressing of rich river loam, using a yard and a half on each green. I found that by using a fertilizer spreader to distribute the loam, more even distribution was achieved, and labor costs were reduced. After topdressing with loam, I covered each green with fertilizer, using an automatic spreader. The mixture was American Agricultural Country Club special 8-6-2, at a ration of 12½ lbs. for each 1,000 sq. ft. of green surface. The loam and the fertilizers were worked into the greens by dragging steel mats across them.

## Topdressed Again in October

In October, I again topdressed the greens with loam, and fertilizer, using the same quantities. After this treatment, I applied arsenate of lead, using 10 lbs. to 1,000 sq. ft. The greens were mowed daily until the frost came.

The second half of the course was completed and ready for play with the opening of the 1940 season. While the entire course was in good condition, I urged the city manager to postpone play until May

25, and operate for the first month of play under winter rules.

At the beginning of the 1940 season, I made a detailed report to the city manager, describing the condition of every tee, fairway and green on the 18-hole course. Of the first 9 greens, only one had a serious amount of clover and two others did not have proper surface drainage. On the second 9 holes there were bare spots on two greens, caused by snow mold.

After the greens had been mowed, rolled and spiked in preparation for opening day, I started a campaign to get rid of the lingering traces of clover that survived the winter on the first 9 greens. For this purpose, I applied a water solution of sulphate of ammonia every three weeks, using 5 pounds to every 1,000 square feet of green surface. The continued application of the caustic solution soon caused the clover to burn up and die out. At the same time, it greatly stimulated the growth of Washington strain creeping bent.

During the spring and summer of the 1940 season weather conditions were in sharp contrast with the previous season. We had a normal amount of rain. The greens were mowed daily with the blade set at 5/16 inch. By June, there was only a negligible percentage of clover left on the greens.

### No Clover on Second Nine

No clover showed up on the greens of the second 9 holes. I believe that by allowing the Washington strain creeping bent to get a good start, we avoided a similar battle with clover on the second 9. I am convinced that the trouble with clover on the first 9 was due to opening the first nine for play too early in an exceptionally dry year and cutting the grass too short.

While clover was my main headache during the first season, I also had trouble with "fairy rings" on the practice green. I first noticed that something was wrong on the practice green in July. The rings then appeared in the form of a half moon and about three inches thick. Each ring measured about three feet in diameter. When I first noticed them, there were five distinct rings, dark green in color, located around the edges of the practice green. Gradually the grass inside the rings started to fade and within a period of seven weeks, it had died out completely. I tried a lime treatment without results.

July, 1941

### CHEERS GOLF WIDOWERS

Gas companies in Southern California make a neat play to women golfers and to the men who complain their wives cook with can-openers since taking up golf.

When public utilities recognize in their newspaper ad copy great interest of women in golf you may be sure that women's play is booming.

I let the greens go through the winter without further treatment. In the spring, no grass appeared inside the rings, so I had to remove the diseased sod and replace it with new sections of healthy sod.

Examination of the old sod indicated that it was apparently part of that left on the site during construction of the new course. Traces of a fungous growth, similar to mushrooms, appeared in the old sod. Bare spots on two of the greens in the second 9, which had been caused by snow mold, were treated in a similar manner.

### 'Crab' Hasn't Shown Yet

So far there hasn't been a trace of crab grass on any of the greens of the new course. Weeds are always an indication of lack of proper plant food. Regular use of fertilizer is the most important factor in keeping crab grass and weeds out of the greens, in my opinion.

The question of the opening date is always a difficult problem for any new course. Naturally the golfers who have

been waiting impatiently for the new course to be completed want to get playing as early as possible. Then, there is the pressing problem of finance. Green-fees rolling into the caddie house are the only answer to that question. But for the permanent benefit of the entire course, especially the greens, the opening date should not be set for too early in the season. If the opening day is postponed until the grass on the greens has a good start, then some of the headaches, like my battle with clover, can be avoided.

### Let Facts Decide Opening

I believe that it is good practice to submit a detailed report on the physical condition of the entire course to the green-chairman at the beginning of each season. Then any decision made by the committee as to the opening date will be based on facts concerning the condition of the course, instead of resting entirely on questions of finance or player desire.

My practical experience as a greenkeeper dates from 1924 when I started as assistant greenkeeper at Elmira CC. From there I went in 1927 to the greenkeeper spot at the old Mark Twain municipal course in Elmira, remaining there until the new course opened in 1939.

I have found that attendance at special courses for greenkeepers is extremely helpful in my work. In 1933 I attended the short course at Penn State Agricultural School, and in 1940, the special class for greenkeepers at Massachusetts State College.

The new Mark Twain course is 6,761 yards long, with 19 greens, 83 sand traps and one water hazard. Given two more normal seasons with a good amount of rain, the course should be in peak condition and ready for tournament play.

No greenkeeper can ever relax his vigilance for a single day during the playing season. But once a new course and greens are safely through the first two seasons, any greenkeeper on a new course can at least breathe a sigh of profound relief.

It has been a valuable experience and I wouldn't have missed it for the world, but I'm glad it's over. I can agree with the old saying that "the first two years are the hardest." During that long dry first summer, there were many times when I wished that I knew some of the ancient Indian rituals used to get rain. To others who plan spring openings for their new courses, my best suggestion is that they pray ardently for rain.

## Table Shows Quantity of Water in a Given Rainfall

**G**RASS uses from 500 to 700 tons of water per acre during a normal growing season. This amount of water is equivalent to 5 to 7 inches of rainfall.

One inch of rainfall:

Wets loam soil to a depth of 6 inches.

Is equivalent to 27,154 gallons to one acre.

Is equivalent to 2,172,320 gallons to an 80 acre course.

Is equivalent to 3,000 gallons to 5,000 square feet.

Is equivalent to the output from a sprinkler delivering 20 gallons of water a minute if it runs for 2 hours and 30 minutes over an area of 5,000 square feet.

The accompanying table showing quantity of water equivalent to depth of rainfall is one greenkeepers have found helpful.

Depth of rainfall in inches	Cu. ft. water to 1 acre	Gal. water to 1 acre	Tons water to 1 acre
1.00	3,630	27,154	113
2.00	7,260	54,308	226
3.00	10,890	81,462	339
4.00	14,520	108,616	452
5.00	18,150	135,770	565
6.00	21,780	162,924	678

**Open New Courses for Employees**—Second 9 of the Hercules CC, Wilmington, Del., and a new 9-hole course for the Seaford (Dela.) G&CC were opened late in June. Hercules Powder Co. owns the Hercules course which is highly popular with its employees and officials. DuPont built the Seaford course for its Nylon plant employees.

Architects for both courses was A. H. Tull of Emmet, Emmet & Tull, New York City and West Chester, Pa., Tull recently designed a second 9 for the Lawrence Park GC, Erie, Pa., which is owned largely by General Electric Co. employees.

**700 Dozen Balls Stolen**—Wilson Sporting Goods Co. store at Cleveland was robbed of more than 700 doz. golf balls in May. Most balls were of pro-only brands. Only golf balls were taken. If Wilson pro-only balls are being marketed by any store the Wilson organization will appreciate information to this effect in order to investigate possibility of such balls being from the stolen stock.



# Service-To-Customer Program Pays Big!

By MARIE G. HEUER

A 9-hole public golf course has had a jump, in permits issued, from 15,000 in 1936 to 35,450 in 1940, a rise from 13 to 60 members in the women's golf club, and a steady increase in season tickets issued to both men and women during that time. When records at that club show you that sales of golf clubs and equipment had tripled in those five years, that income from private lessons had tripled, too, and that profits on refreshments had jumped even higher, you'd recognize that a smart merchandiser must be on the job.

This progress has been registered at the Washington Park Golf Course at Racine, Wisconsin—the little course once cited by Bob Ripley as the only one in the world situated in the heart of a city. Lying in a natural ravine, it has a stream running through it to make several attractive water hazards, and deep gullies providing several sporting shots. But with the competition of a number of excellent 18-hole courses in the city and surrounding area, the Washington Park course used to be thought of as a place for office and factory workers to go after work on week-days when time was limited. Today, increasing numbers of men and women think of it as a spot for play anytime and all through the daylight hours.

## Strive for 'Private Club' Service

All this didn't happen accidentally. It was the result of a program to give customers of this public course the personalized service they might expect from a private club.

"Everything we've done to increase each customer's feeling that we're personally interested in his enjoyment of the game, has sparked up interest—and business," Irv Peterson, pro at Washington Park, told us.

Maintaining the course in excellent condition is, of course, a major point in service. Greens are top dressed fairly frequently, and are watered beginning at 3 a. m. so as not to interfere with the course's heavy play. Fairway cutting also is done with minimum interference with play. Tee plates and cups are changed often.

"We keep a record of suggestions made

by customers," said Irv Peterson, "and I make a point of playing the course frequently to check up on those suggestions and to find out new things for myself. On the ninth hole, for instance, a tree right in the middle of the fairway was unfair to the go'fer who hit a straight shot off the tee. Now we have trees on either side of that direct line to tantalize the fellow who slices or hooks, but the center tree is gone. Building up the back end of the greens, putting in an extra tree or two in picturesque spots, changing the size of a bunker; all these changes draw appreciative comments from our customers—and keep them coming back."

Re-arranging the pro-shop, refreshment counter, and recreation room paid big dividends in profits and in increased good will from men and women customers. A few years ago the permit counter and the display of golf equipment were huddled in a small 18'x12' room. Refreshments were served in a 20'x30' room adjoining. Since the smaller room was nearer to the first tee, most customers hurried in to buy a permit without even noticing the refreshment facilities, often got into their cars directly after the game was over—and the profit to the course



Gotta hand it to the British. Here's an illustration from a Silver King ball ad in *Golf Monthly* of Edinburgh.

The ad copy reads: In any case, who wouldn't (in these difficult days) take some risk to retrieve his precious Silver King.

And we Americans should bellyache about our problems in the golf business!



Open display racks around the center of the floor and around the walls give Washington Park customers a chance to touch and inspect equipment—which Pro Irv Peterson has found is a sure way to close a sale.

from their playing was no more than the price of their permit.

By transposing the pro-shop to the larger room, and emphasizing variety of equipment and sparkling cleanliness and color in the display, profit jumped on refreshments and equipment, as well as permit sales. Now customers must walk through the refreshment room at least once each time they buy a permit. Seeing someone drinking a 'coke' or eating is a strong sales builder. When players come in from the course, again they sit down to fan over a soft drink—with no sa'es talk interference whatever.

Time-saving adjustments were also worked in. Formerly the pro-shop and refreshment rooms were separated by a door which was a whole wall length from the cash register. By cutting an opening in the wall, about 50 steps are saved if the pro or his assistants need to go from one counter to another.

An extension phone installed in the pro-shop next to the pro's desk saves him another 40 steps and is a big help in giving close attention to calls that come in, even when the clubhouse is crowded. The pay phone on the wall of the refreshment room is now used mostly by the customers.

Best of all, the larger display room has enabled Peterson to double his stock, and

to set it up on open display racks that give customers a better chance to touch and try equipment—the surest way that's known to close a sale. Display racks follow a neat path around the center of the floor and around the walls so they won't get into the way of traffic. Display boxes are mixed so there's a pleasing harmony of color, a device that seems to lead customers to pause more quickly than they did before solid masses of the same color.

"When we sell a set of clubs," said Irv, "we make a point of leaving the empty box up for a day or two. The psychology of that almost always pulls another sale soon after. Customers get the feeling that the clubs are moving, and they're more encouraged to make investigations of their own."

We heard a carpet sweeper going in the next room as we talked, and noticed one of the caddies picking up some papers that had dropped on the floor.

"That's our daily housecleaning," laughed Irv, "to keep everything nice and bright. All our display boxes are dusted every morning. Our fiber rugs are taken outdoors, brushed, and aired in the sun at seven o'clock each morning, and grass brought in by cleats during the day is swept up with the carpet sweeper. We can

*(Continued on page 35)*

*The biggest golf ball  
in America*



2,000 pounds of internal pressure for distance... fortified with the tough Cadwell-Geer Cover. Exclusive True-Solution Center (100% liquid) for perfect balance and uniformity. That's the Spalding DOT... America's fastest selling 75¢ ball... *Sold at Pro Shops only.*

**SPALDING "DOT"**

A. G. SPALDING & BROS., DIVISION OF SPALDING SALES CORP.



A. E. Penfold

## A. E. Penfold, Pioneer Ball Manufacturer, Victim of Sea Attack

**A**LBERT E. PENFOLD, noted rubber and golf ball scientist and manufacturer, returning to England from the United States this February aboard the freighter *Siamese Prince*, died when the ship was sunk by a Nazi plane attack in the Irish sea.

News of Mr. Penfold's loss was withheld in the hope that he had been picked up by an outbound ship or was a prisoner of war. It is now known that none of the *Siamese Prince*'s passengers, officers or crew survived.

In announcing the loss of its chief, the Penfold organization says:

"Mr. Penfold was a frequent visitor to the United States where he had wide business interests. Each year since 1932 he came to further the interests of the Penfold golf ball which from the start he insisted be sold only through professionals. Growth of the Penfold American ball business made it necessary in 1936 to install a factory in Brooklyn.

"Throughout his career, dating from the days of the solid gutta percha balls, Penfold was identified with rubber and the manufacture of golf balls. He was one of the first to interest himself in the rubber-cored ball and to develop sound methods of making and winding the rubber tape and thread, and the materials and methods whereby the cover material could be blended properly and sealed to the core by application of heat.

"Early recognition of Penfold's ability came when the solid guttie ball was standard. The gutta then used for balls was often dirty gray, full of foreign particles and none too easy to find on the imperfect fairways of that day. Then, when a leading authority made the statement in his presence that white gutta percha would make a fortune for the inventor, Penfold spent an intensive period in the laboratory. A pure white gutta percha was his initial contribution to golf.

"A noteworthy improvement in modern

golf ball manufacture he devised is a winding technique which permits extreme tension of the rubber thread and unerring accuracy. The trick in winding is to prevent too many loops of the rubber thread crossing at exactly the same point. The machine Penfold designed is based on a simple scientific adaptation of the laws of chance.

"He figured that if the core of the ball were shuffled instead of confined in a narrow groove, the core would turn itself automatically and the rubber thread would be taken up where and as needed.

"The Royal and Ancient had a ball made which they believed would set a limit to the distance potentialities of all golf balls. Penfold and other ball manufacturers were called in and shown the specifications of the new ball which was supposed to be the perfect 'restrictor.' During the inspection Penfold startled the assembly making the quiet statement that he could build a ball to those very specifications that would out-drive any ball then made.

"The first test of the Penfold production was held on a Sunday prior to a British Open Championship on a course near St. Andrews. When the selected driver hit the first Penfold designed ball it carried far beyond the furthestmost markers. Other Penfold balls gave identical results. Examination followed the demonstration, and the Penfold test ball was found to conform to the letter of the restricting specification.

"Mr. Penfold became identified with the development of golf balls in the service of the Silvertown company, and during that time the Silvertown make rose to world fame. When he left Silvertown he joined the Dunlop company and after a number of years at Ft. Dunlop, he set up business for himself at Birmingham in 1930. For a period after founding his own factory, he was also expert adviser to the North British Rubber company in their ball section.

"In the past year, Mr. Penfold was preoccupied with his part in the British war effort.

"The Penfold factories, both British and American, together with their branches and agents throughout the world, will continue without change in organization. The directors of Golf Ball Developments, Ltd., of England, together with the officers of the American office, R. van Buskirk and H. N. Davies, will continue to follow the same selling policy, manufacture to the same high standards and carry out generally the policies of 'A. E.'"



# A Real Merchandiser —That's Heinie

Crystal Lawns at Joliet has great play—still retains its 'private club atmosphere.' Reason?—Heinie Sick's smart merchandising.

By KARL SUTPHIN

HERE'S a fellow who's typical of a superior class of pros that are seldom heard of more than 50 miles away from their home courses. He's one of a type you find east, west, north, south and central. You don't see his name in tournament news. You don't see him even able to take every Monday off during the season. But when you talk to his banker and to golf manufacturers, you learn he's rated as a fine, sound businessman.

This particular fellow is Heinie Sick, pro at the Crystal Lawns daily fee course at Joliet, Ill.

It's one of those courses where patrons play so habitually that it practically has a private club air about it. And Heinie is a major reason for this faithful patronage. He's built up play at the course by treating each customer as customers like to be treated, and are treated at successful retailing establishments.

Joliet is a manufacturing town. There are 16-year-old boys making \$52 a week at an ammunition plant near Joliet. When you bear in mind that Heinie has been coach of the Joliet High School team that won a state championship from a field representing 143 schools, that he coached the Joliet Catholic High School team that won the Chicago District Catholic high school championship, and that Heinie has been a

pal and counsellor to many of Will County's 1200 caddies, you have a pretty fair hunch as to where these kids go to buy clubs when they get into the real wage-earning class.

Add to that foresighted promotion with the kids Heinie's work in promoting the state-wide YMCA tournament for Joliet's YMCA, many of whose members Heinie teaches, and the unusual competitive program at the Crystal Lawns course, and you have additional reasons why this Sick has a merchandising background that has set him up in a most substantial business.

The more play there is at the course, the happier the course owners are, naturally, and the more sales opportunities Heinie has. So he has emphasized a competitive program that's of keener interest than that at many private clubs.

One of the big championships at Crystal Lawns is the "Old Man's Championship." Contestants have to be over 40—not so old, but a smart lower age limit to separate the businessmen from the youngsters who used to caddy for them and who are too hot for even competition. But it takes at least an 86 to qualify for any flight of this tournament of the elders so you can see the Old Men are not too feeble.

To get in the 32 of the first flight of the major tournament played annually at Crys-

Sick makes every available bit of space count for plenty in the Crystal Lawns pro-shop, which is only 14 ft. square. A good display of clubs and bags, all in the open for personal inspection. Sick has found to be well worth the comparatively large amount of space devoted to them.



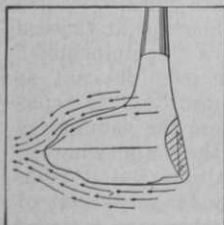
# WITH THE Speed of



## THE NEW SLIP-STREAM HEAD OF A WILSON FOREWEIGHT "WOOD" KNIFES THROUGH THE AIR

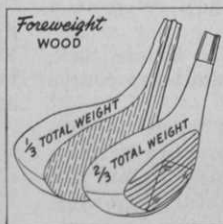
Heretofore, wood heads have been built with the bulk of the weight in the *back*. On the principle of the early *pusher*-type airplanes, the power came from the *rear*. "Foreweight," on the other hand, means exactly what it says—the dominating or *power* weight is in the *front*. Part of this foreweight is secured by the design of the head. To this is added a new metal face

insert, used for the first time in these beautiful Wilson Foreweight Woods. It not only concentrates power weight directly behind the "sweet spot" but it gives a more powerful getaway to the ball.



### NEW STREAMLINE DESIGN

The *second* important innovation in the design of these new Foreweight Woods is a new, dynamic streamlining of the head. Note illustration. Due to these scientific slip-stream lines, air resistance is reduced to a new minimum and the velocity of the club head is increased.



### A FREE, SMOOTH SWING

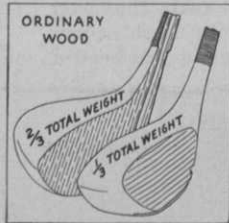
Because of this new weight placement and slip-stream design, there is a new freedom of swing and follow through.

From the top of your swing, down, through the ball and up into your follow through, the Foreweight Club head is like a modern Dive Bomber hitting into its dive upstairs, gaining speed as it falls; then pulling out of the dive and zooming up again.

### SOLD BY PROS ONLY

Foreweight Woods have been designed for Pro-Shop-selling exclusively. They are alive with selling features which you alone can offer

your members. We recommend that you stock them at once—use them yourself and let players try them. Do that and we predict good business in Foreweight Woods for you.



# THE NEW Wilson Foreweight WOODS