helpful in minimizing disease. Good drainage is another device which helps in water control and definitely helps to reduce disease.

Some grasses have much greater resistance to diseases than others. The use of the better grasses is a big step toward minimizing interference. We are trying to look at this whole operation from the long-term standpoint. We know that an attack of disease must be dealt with on the spot and not sometime later.

Late Afternoon Work

It has been a pleasure to work with supts. when a course was to be prepared for a major championship. At the moment we shall refer to Canterbury where we worked with Mal McLaren getting ready for the Open. One of the operations that made history was that of mowing when the grass was dry. During the tournament the fairway mowers were started on the first hole as soon as the last match had cleared the second tee. What a pleasure it was to see the dry grass fly behind the units and to see the near-perfect job that was done.

Frequently we have asked the question, "Why can't grass be mowed when it is dry?" When it has rained for two weeks that becomes a pretty silly question because grass has to be cut before it gets too high, wet or not. Maybe more mowing might be done in late afternoon when most players have finished for the day and there would be minimum interference with the players. Labor has a great deal to do with this idea but we have seen it work some places.

For several years we have been calling attention to the fact that well-fed turf requires less irrigation. Grass that is well supplied with nutrients can make much more efficient use of the water that is available to it. It is a fact that nitrogen is cheaper than water. To budget-minded people this should be great news because it means that golfers can have better turf at lower cost. This paragraph refers mainly to tees and fairways, not to greens.

Constructing A Course

Q. I am in the initial stages of building an 18-hole course on my farm. Please send to me a list of textbooks, literature, etc., that would help me in building and maintaining and operating the course after completion. Also, would you advise me to tile the greens where there is good surface drainage? I plan to build up my greens with clay, topping with topsoil and then adding approximately 85 per cent sand. (South Carolina)

A. Under separate cover I am sending you a list of reference material that has been published. This should be helpful in building your library.

The best help in building the course will be to secure the services of a competent course architect. The pres. of the American Society of Golf Course Architects is David W. Gordon, Doylestown, Pa.

The best way to maintain the course after completion is to secure the services of a topnotch supt. Headquarters for the GCSA is P. O. Box 106, St. Charles, Ill.

If subsoil under your greens is clay, which will slow the rate of water percolation, I would definitely advise a tile system. If, however, you have sand and gravel, which will permit the ready drainage, then you will not need tile. Surface drainage is advisable in any case, whether or not the subsoil structure demands the use of tile.

I'm a little fearful of your plan to first build up your greens with clay, then top with topsoil and then add approximately 85 per cent sand. If you build up your greens with clay, then it must be that you have a clay soil. This is the building material. This demands that the tile be installed in the clay base to assure good drainage. I would mix the topsoil and the sand together with a bulldozer, motor patrol grader or some mechanical device so that the materials are mixed properly and uniformly off the site. Properly prepared top mixture can be hauled to the green, dumped and spread so that you have a perfectly uniform sandy soil on top of your drainage system. This will assure well-drained greens, deep roots and much greater golfing satisfaction in the years to come.

(Continued on page 110)
WORTHINGTON SALUTES -

THE TWO MEN

GOLF

WORTHINGTON MOWER COMPANY
WHO MAKE POSSIBLE 

a la car!

The Course Superintendent and The Golf Pro!

These two men, the first to recognize the possibility and pleasure of golf car play, rate a salute from us all! Working from dawn to dusk for better golf, both want to be sure that the golf cars used on their courses do not undo this fine work.

For over 45 years Worthington has built tractors and gang mowers to help make course maintenance better and easier. That's why the Worthington Champ Golf Car, *built with all of Worthington's grass maintenance "know-how"*, is the car that's being recommended by more and more Pros and Superintendents.

The Worthington Champ has a low center-of-gravity for maximum player safety, ample ground clearance and big, low-pressure turf-type tires for excellent traction and high flotation on the turf. It's a car that *pampers the course* they work so hard to keep at peak condition! *Write today for Worthington Champ sales or rental plan information.*

The most complete line of large-area grass maintenance equipment in the world!

Stroudsburg, Pennsylvania
Subsidiary of Jacobsen Manufacturing Company,
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Electric Car Division

May, 1959
New Superintendent Gets Quick Education in Member Relations

BY PAUL VOYKIN
Supt., Calumet CC, Homewood, Ill.

A year ago this spring when I took over as supt. at Calumet CC after having served an apprenticeship at Olympia Fields (Ill.) CC, I had quite a few qualms as to whether I was going to be able to handle the job. I suppose a lot of fellows are beset by self-doubt when they take that big step from an assistant’s post to the head man position. For a while you are a little afraid if you have forgotten what you have learned, or if you are capable of thinking at the right time of everything you’ve learned. Possibly even worse than this, you start thinking about all the bad things that can happen to your golf course after you’ve taken over.

It wasn’t bad enough that I was taking over my first big job. The course I was going to had been chewed up by tollway construction the fall before, making it necessary to construct five new holes and rebuild four others. To make matters even worse, heavy spring rains knocked out two of the remaining nine holes until we could get around to tiling them.

Three Times Around

So that the members could get in their golf, we had them play six of the seven remaining holes, suggesting, of course, that they make the circuit three times to get in a full 18. Traffic on these half dozen holes reminded you of a merry-go-round, with greens, tees and even fairways taking a terrific beating because of the concentrated play. As you might guess, this was another big knock in the head for a fellow who already had a king size headache.

But I lived through it. Not only because of hard work in trying to bring construction and maintenance along simultaneously, but more important because I suddenly realized that I had a tremendous job in members relations to handle.

Occasionally I thought that some of the protests, most of them mild, by the way, about playing conditions were a little unwarranted, but from the beginning I decided I had to roll with the punch. Fortunately, the members were at least 99 per cent reasonable and understanding after things were explained to them.

Keeps Members Fully Posted

We did just a little more than explain why occasional rough spots developed on the six playing holes. By bulletins as well as verbally, we kept the members posted as to progress on the new holes that were being constructed as well as those that were being repaired. This is very important in keeping them in the proper frame of mind.

Incidentally, I shouldn’t take credit for carrying the entire member relations load. Walter Haefner, our club mgr., and Dave Mose, Calumet’s pro, also pitched in by providing what I would call a great deal of diversionary activity to keep the members’ minds off the fact that they weren’t playing as much as golf as they wanted to play. Walter arranged more parties, dinners and barbecues than the club had ever known before. Dave ran a series of putting and offbeat tournaments that proved here is a man of great imagination.

Getting along with six holes where traffic is heavy isn’t easy, but this is how we managed to survive until September when the remaining 12 were put in play:

- Pins were changed daily, mostly to the sides of the greens, and brought into the centers on Saturdays and Sundays.
- Tee markers were moved daily and usually twice a day on Saturdays and Sundays. Tee divots were seeded every Mon-

(Continued on page 111)
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the golfers' silent electric servant

PUTS MONEY IN YOUR POCKET
RUNS . . . . 45 HOLES . . . . . ON A SINGLE BATTERY CHARGE
Eliminate that last nine let-down!

Now golfers can really enjoy the healthful walking exercise of golfing — KAR-GO-KART carries the load — uphill or down.

KAR-GO-KART has adjustable forward speeds — gives you a lift on the hills.

Eliminate the caddy problem . . . KAR-GO-KART carries one or two bags . . . keeps play moving steadily on crowded days.

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CITY STATE

May, 1959

65
Golfer Required to Know Placement of Mats

It is a tradition that a golfer knows every blade of grass on his home course. Now comes the Kentucky Court of Appeals with an additional requirement: he must also know the position of every mat and rug on the lockerroom floor. This ruling was made in the court's decision involving a suit by Dr. Clarence Humbert against the Audubon C.C., Louisville. Dr. Humbert came to the club one day to play golf. He entered the lockerroom by walking down some concrete steps into a vestibule and from there went to his locker, changed to his golfing clothes, including his spiked shoes, and retraced his steps towards the vestibule. Just before reaching it he slipped and fell and received the injuries for which he later sought damages. The locker room was divided into sections. Three long aisles separating the sections usually were covered by long rubber mats. On the day on which the accident occurred, the rubber runner leading to the vestibule door had been pulled back about four feet from the threshold leaving the asphalt tile surface exposed. It was on this exposed surface that Dr. Humbert slipped and fell.

Contributory Negligence

At the trial Dr. Humbert contended that the club was negligent in leaving this space uncovered. The club, in turn, contended that Dr. Humbert was guilty of contributory negligence because he failed to notice the changed position of the rubber mat and also the condition of the floor. The court said in part: "According to his testimony, if the plaintiff had looked down at the floor upon which he was walking he could have well observed not only the changed position of the runner but also the slick condition of the floor. He testified that he fell as he started to make a right turn to go into the vestibule. What was he doing when he made the turn? The following testimony answers the question:

Q. What were you looking at as you turned the corner?
A. Looking straight ahead.
Q. You weren't looking at the floor?
A. No one does when they are walking.
Plaintiff admits that he wasn't looking at the floor, the court decided. He admits that he could have seen the condition that caused his injury if he had been looking. Yet he contends that the question of his contributory negligence should have been submitted to the jury. We cannot agree."

(Humbert v. Audubon CC, 313 S.W.2d 405. May 16, 1958.)

Gets N. Y. Turf Scholarship

New York State Turf Assn. undergraduate scholarship for 1958-59 has been awarded to Richard Mitchell of Nassau County, L.I. His father, Henry, is sup't at Lake Success GC and his grandfather, Robert, was sup't for many years at Kernwood Club, Salem, Mass., where he developed the Kernwood strain of velvet bent.

1959 USGA Competitions

May 15-16 Walker Cup Match, Muirfield, Scotland
June 11-13 National Open, Winged Foot GC, Mamaroneck, N. Y.
25-27 Women's Open, Churchill Valley CC, Pittsburgh
July 13-18 Amateur Public Links, Wellshire GC, Denver
Aug. 5 - 8 Junior Amateur, Stanford University GC, Palo Alto, Calif.
17-21 Girls' Junior, Manor CC, Norbeck, Md.
24-29 Women's Amateur, Congressional GC, Washington, D. C.
Sept. 14-19 National Amateur, Broadmoor GC, Colorado Springs
Oct. 5 -10 Senior Amateur, Memphis (Tenn.) CC
Check these advantages...

CARLON KRALASTIC
PLASTIC PIPE

scores with...

- **LOWER COST**—Lower in cost than metal or asbestos-cement pipes; light weight, slashes installation costs.

- **EASY-TO-INSTALL**—Light as a feather, easy to handle, you can install over 40 feet a minute after trenching.

- **CORROSION-RESISTANCE**—Carlon Kralastic will not rust, rot or corrode. Minimized friction loss means minimum pipe size for maximum flow.

- **GUARANTEED DEPENDABILITY**...Carlon Kralastic is permanently identified with the famous stripe and carries the Carlon guarantee.

Many progressive golf courses throughout the country have solved their watering problems with a dependable Carlon installation. A Carlon golf course expert is ready and willing to show you how easily and inexpensively you can install a low-cost Carlon Kralastic golf course watering system.

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FRANK P. DUNLAP, Superintendent, Baltimore Country Club, Baltimore, Maryland, states: "This past season has had some of the worst weather conditions that I have ever experienced. I used 'Tersan' OM on three of my most critical greens at the Five Farms Course. The results were most satisfactory, and I shall continue to use 'Tersan' OM in the future. I recommend this material to anyone for prevention and control usage."

Superintendents agree—

New combination fungicide is easier to use...gives

"I think 'Tersan' OM is superior to any single fungicide. It gave excellent control during a bad disease year. 'Tersan' OM proved to be a very convenient material to handle and eliminated spray-tank mixing."

reports OSCAR W. BOWMAN, Superintendent
Old Worson Country Club
St. Louis, Missouri
JOSEPH VALENTINE, Superintendent, Merion Golf Club, Ardmore, Pennsylvania, says: "‘Tersan’ OM proved most satisfactory as a safe, easy-to-use, efficient turf fungicide. Under normal conditions, the preventive rate of 3 oz. per 1,000 sq. ft. held disease under control. Under the most adverse conditions of high temperatures and humidity, ‘Tersan’ OM at double the preventive rates caused no discoloring or retarding of growth, but stopped and/or controlled all disease activity present."

Du Pont TERSAN® OM
wide-range disease control

“Tersan” OM will give you, as it has given these superintendents, the combined advantages of organic mercury and “Tersan” 75 mixtures in a single, easy-to-use turf fungicide. Control all major turf diseases with just one product... Du Pont “Tersan” OM.

“Tersan” OM comes in 3-lb. containers. It eliminates spray-tank mixing, saves you time and labor. And “Tersan” OM offers you a large safety factor, even when applied at higher than recommended rates. Order Du Pont “Tersan” OM turf fungicide from your local golf-course supplier!
HALFWAY down the west coast of Florida, in the heart of what until a few years ago was largely considered fishing and hunting country, they have built what promises to be one of the South's truly fine golf courses. It is called Paradise and, according to players who have sampled its 6,500 yards (championship-6,966), that is just what it is so far as golf layouts go. In this, you have the added and weighty endorsements of such eminent golfers as Tommy Bolt, Doug Ford, Frank Stranahan, Gay Brewer, Jr. and Vic Ghezzi, neighborhood regulars, who have purchased lots and have built or are planning to build homes overlooking the course.

Pinpointed as to location, Paradise is at Crystal River, which is less than one hundred miles north of the Dunedin — Clearwater region. Surrounding it are rather primitive but breathtaking spring-fed waterways for boating and swimming. If you like to mix hunting and fishing with your golf there are opportunities in practically every direction. To the west, for example, you can fish in salt water; about 30 miles to the east is one of Florida's finest game preserves.

Open 12 Months

Unlike most Florida courses, but in step with a more recent trend in deference to heavy year around tourist business, Paradise CC is being kept open 12 months a year. Play, as you would expect, is most active during the winter months, but patronage last summer, the first in which the club was in operation, was very
The Crystal River club is a half-million dollar venture that was planned, discussed (and even partially constructed) over a period of several years. But the project never really began to take off until J. A. Pruitt, Jr., a young Florida businessman and co-owner and manager of the course, came along in February, 1958, and supplied the energy that carried the development to completion only a few months later.

**Designed by Mahannah**

Mark Mahannah, one of the better golf architects, designed the 18-hole course and Pruitt supervised its construction. After the site was cleared and contoured, Pruitt brought in enough topsoil to cover the entire 18-holes to a depth of 16-inches. Fairways are of 328 Bermuda and tees and greens are planted to Everglades No. 1. Canals, bays and small lakes leading into, or located on the course, are irrigation sources.

The watering system is approximately eight miles in length with sprinklers located about 75 ft. apart. Two 20 hp pumps provide about 40,000 gal. of water per hour and practically every square inch of the Paradise course can be watered. At Paradise there is no evidence of the sandy type turf that abounds in this section of Florida and in summer, according to persons who have played or seen the course, its rich green color stands out quite startlingly in contrast with the surrounding countryside.

There is plenty of green for players to hit at Paradise. Each covers about 10,-
Paradise is home of USGA Open trophy since Tommy Bolt plays out of the club. In photo with him are (l. to r.): Jerry Bond, assistant pro, Larry Huse, Chuck Johnson and Phil Greenwald, co-pros.

000 sq. ft. in area. Tees, which also are covered with cozy putting surface turf, are unique in that the rear areas of all 18 have at least one cup installed so that the golfers can keep occupied with putting practice while awaiting their turns to hit. On days when the course is jammed this almost miraculously cuts down complaints from players who ordinarily would be greatly disgruntled and endlessly fretting about being held up.

In charge of keeping Paradise’s beautiful acres in the kind of condition that befits a near half-million dollar investment is John Gibbs, veteran Florida supt.

The Crystal River club has about 125 regular members. In addition, it gets a big play from guests at the neighboring Port Paradise motel as well as tourists who spend their vacations in this part of Florida. This calls for extensive program-

ming of golf activity at the club. Particularly during the winter. The man in charge of this is Chick Harbert, the one-time PGA champion and summertime headmaster at Meadowbrook CC in Northville, Mich.

**Two Pro Operators**

The pro shop is operated by Phil Greenwald of Hinsdale (Ill.) CC and Chuck Johnson, Butterfield CC, Hinsdale, during the winter months. In the summer, their assistant, Jerry Bond takes over.

As at most resort type courses, Greenwald and Johnson specialize in soft goods sales. They are among the first shops in the country to display the latest styles in golf attire since the manufacturers make a point of getting their latest creations into Paradise for pre-spring showings.

The Crystal River pro shop is one of the most handsomely appointed in the South. It was designed by a leading Tampa interior decorating firm, is beautifully panelled and there is a great deal of emphasis on natural lighting to bring out the most colorful features of the golfing merchandise.

One of the most successful selling aids Greenwald and Johnson came across last winter was a three-tiered rolling cart on which they displayed women’s hats and miscellaneous sportswear. For reasons which they still haven’t figured out, the self-service cart became the hub around

(Continued on page 109)
"More golfing fun than you’ve ever known with a CUSHMAN Electric Golfer."

advise Jimmy Demaret and Jackie Burke, Jr.

Why let fatigue or physical condition keep you from playing as often and as much as you’d like? Ride the kitten-quiet Cushman Electric Golfer. Discover enjoyment you’ve never known before. A top value for comfort and performance.

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May, 1959
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Laying 6" Uscolite pipe in Pine Ridge Golf Course. Despite its size, this 40' length is easily handled by three men.