assistant. It shows evidence that the pro has executive capacity and spends time and thought training his team-mates. Any sales manager who gets the compliments from his customers about his salesmen that I do is lucky."

In a small room off Harry's shop is his office. "The most important place in the shop. There I can plan, think and do the paper work. It's the place where I get groundwork laid for proper action," Obitz says. "I make notes. That keeps me from letting some remark about what a man needs or wants being forgotten. That habit has helped me make many sales."

Over Harry's desk is a sign that is pretty much the key to his operations. The sign reads:

DO IT
If it's worth doing . . . DO IT!
If it concerns me . . . DO IT!
If it concerns you . . . DO IT!
If it helps someone else . . . DO IT!
If you like it . . . DO IT!
Even tho' you don't like it . . . DO IT!
And get it done . . . NOW
Not five minutes later.
Harry Obitz.

A lot of pro shops would increase business and player pleasure by adopting the Obitz policies and practices, "Now and not five minutes later."

SHORT GOLF COURSES

(Continued from page 62)

fill was required. A few thousand yards were obtained from surrounding high land. On the inspiration of Mr. Zinkus additional fill was obtained by digging a moat 40 to 50 feet wide and about six feet deep around three sides of the course. This fill together with that from surrounding areas brought the general level up 2 or 3 feet above the old level with greens some 2 feet above this. The moat now filled with clear fresh water from a shallow stream that previously cut across the property makes a very beautiful boundary to the course.

Experience on other courses has pointed out the need for relatively large greens on a floodlit course and those on Seaview have been built accordingly. Another fact determined by experience is that greens on floodlit courses stand up much better under the exceedingly heavy traffic if great care is taken in designing each in relation to the following tee. While the design varies for each hole it is important that the green be so shaped that the pin can always be placed to encourage traffic to the next tee to leave the green as soon as possible. Observation of this point at Seaview will save untold headaches in years to come in greens maintenance.

The main cost items to consider in building a short floodlit course are the greens, fairways, floodlights and wiring, water system, cabin, fencing, parking lot, course furnishings, playing and maintenance equipment. With careful design and proper supervision a high quality 9-hole floodlit course can be installed on suitable land for $9,000 to $13,000 and an 18-hole layout for $15,000 to $22,000. These figures do not include real estate. With ideal soil and terrain they can at times be substantially reduced.

Short Courses Are Money Makers

A short golf course is a profitable business. Space does not permit listing all the locations in which one might be built as a valuable adjunct to another business or as a non-profit recreational facility for industries providing employee recreational programs.

We know that a broad cross section of the population will play and enjoy short golf when facilities are available. Undoubtedly we can expect the development of a substantial number of these attractive installations in all parts of the country in the next few years.

ADVANCES IN TURF

(Continued from page 58)

the primary cause of injury.

Leaf spot of the helminthosporium type was very bad on the greens at a club in western New York during May. No fungicide would stop it. Apparently the same thing happened in 1952 and made the greens bad for play. The turf was badly thatched and contained considerable Virginia bent. A test showed the soil to be very acid and low in available magnesium and potash. The greens were cross aerified, part of the grass removed with a Verticut, and dolomitic type lime of a high magnesium content was applied. The new fertilizer program included the more generous use of potash. These things helped the grass stage a comeback and enabled fungicide to perform as expected.

Fairy Ring New Problem

The fairy ring problem is a worthy one for somebody to study and solve because the rings seem to be on the increase in putting greens. As yet no quick cure is known. The causal organism resides in the soil and is of the mushroom type. This

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There are two ways to accommodate the growing number of golf carts at your club. One is to add storage space.

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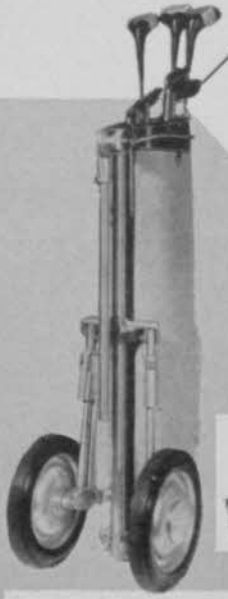

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Light and maneuverable, Con-Voy has **(1)** quick, positive hand release lock action. **(2)** 24 position ratchet handle. **(3)** Exclusive "Snug Fit" bag brackets which adjust to any size, won't damage bags. Also available, special brackets to accommodate large round bags.

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means it does not attack living tissue. The fairy ring fungus lives on dead soil organic matter. This statement may seem illogical to some who have seen dead grass in fairy rings.

A narrow irregular streak of darker green grass is one indication of fairy ring. In a few bad cases the grass withers and dies. When the fungus is active, the soil has a faint mushroomlike odor. It is often possible to see the white, thread-like mycelium in the soil. Unlike most plants, fungi do not have chlorophyll. They cannot manufacture sugar and must get their energy food from food previously produced by organic matter. In the case of fairy ring it is from the partially decayed grass roots, stems, and leaves in the soil. If there is enough energy material the fairy ring fungi compete with the grass for the soil supply of nitrogen and moisture. When there is not enough for both, the grass withers and turns brown. As the mycelium die and undergo decay the nitrogen in their tissue is released and grass becomes greener.

One club solved the fairy ring problem this way: The rings were very bad, due to the accumulated layer of organic matter in the surface thatch of partially decayed grass plants. The basis of their program was to reduce the soil supply of energy food. The greens were aerified repeatedly and small doses of dehydrated lime were applied periodically to speed organic matter decomposition. Combs and brushes were used also to keep the grass in check. Top-dressing was not used until decomposition was well advanced. Then one of the heavier fairway discs was used to rough the surface so top-dressing made contact with the soil. Until a better way is found, those plagued with fairy ring should try this prescription.

Despite all that has been written and said, there is too much surface thatch on many greens. The new Verticut machine has demonstrated its worth for removing surplus grass. Top-dressing should not be used on thatched greens until enough mat is removed so the top-dressing will make contact with the soil.

Although crabgrass was discussed in the September issue of GOLFDOM, it may be of interest to cite one example of a club where greens were rid of this weed in a single season. Last year the greens were unplayable, this season they were the equal of any in the district. Lead arsenate was applied in May at ten pounds per 1000 sq. ft. After that greens were sprayed weekly with PMAS, and the rate of nitrogen feeding was boosted to a sound level. Lead arsenate is returning to favor for spring use on the greens. That is as it should be.

During the hot weather power greens mowers aggravate and may cause turf damage. Speed is partly to blame, but the slippage friction from driving through the drum bruises grass, especially when it is about to wilt. Many superintendents stop cutting at the first sign of wilt. Power mowing is responsible in part for some of the loss of turf on the aprons. Injury in both cases is aggravated by speed. Just as the mania for speedy cutting of fairways came to an end, slower cutting on greens is bound to come. This fact should be recognized by the mower manufacturer and encouraged. The workmen should be trained to walk at a steady but moderately slow speed, especially in hot weather. They should be taught how to make a wide sweeping turn on aprons, and aprons should be wide enough to make this possible.

Wide aprons save grass because wide sweeping turns with power greens mower is possible.

Those who want nice turf on greens and on the aprons must not demand that the closely cut putting surface extend to within a foot or two of the edge of the green. In some cases injury to the turf around the edge of the green was aggravated by failure to train the water man to keep banks and slopes around the green thoroughly moist.

(To be concluded in January, 1954 issue)

Plastic Pipe Saves Muny Course Over $5,000

By VAN WATSON
Mgr., Sanford (N. C.) Golf & Country Club

A FEW months ago, I went to our Board of Aldermen in Sanford, N. C., with an idea for a sprinkler system which would save our municipally owned 9-hole course at least $5,000. I had been told by representatives of Triangle Conduit & Cable Co., Inc., New Brunswick, N. J., manufacturers of plastic pipe, that installing plastic pipe would save us considerable money over a regular iron pipe installation. We were starting from scratch because up to this point we had had no sprinkler system and had depended entirely upon the weather which certainly had not served us very well.

The Board of Aldermen were not hard to convince when we pointed out to them that plastic pipe, being light and flexible, was considerably easier to install than ordinary types of pipe. They gave us the "green light," the pipe was shipped and a Triangle representative stayed with us throughout the entire installation.

My estimate on the cost of installing *ordinary* pipe ran to about $10,000 or a little over $1,000 a green. When we finally added up our costs of material and labor for installing the plastic pipe, the whole job, including making the pond, came to less than $5,000. With the strong possibility in mind that others would be interested in such savings, I'll go into some of the details.

We used 1600 ft. of 3 in. pipe, 150 ft. of 2 in. pipe, 500 ft. of 1½ in., 2260 ft. of 1¼ in., 100 ft. of 1 in. and 500 ft. of ¾ in. pipe. The 3 in. pipe went into the pond and was pumped out through a Peerless Fluidyne pump close-coupled to a single-phase 115-230 volt, 5 h.p., 3450 RPM motor. We had only planned on enough pressure to water five greens at one time but the smoothness of the inner wall of the plastic pipe allowed us to water all nine greens at one time. The pressure at the pump was about 60 lbs. and the pressure at the greens was 40 or 45 lbs.

We dug our trenches about 8 or 9 in. deep, using a single plow behind a Ford tractor. The Triangle representative told me that in cold country freezing water doesn't affect the pipe. It merely expands with freezing water or ice and comes back to normal when temperatures rise.

The thing I liked best about this pipe was the fact that it is so light and flexible. Installation is an extremely simple job. When we came to any kind of an obstruction like a large rock or a tree, we simply went around it. We didn't have to worry about blasting. The three men I had working on the job found the pipe extremely light and easy to handle. One man can carry a coil of 200 ft. without any trouble.

A screwdriver and hack-saw are only tools needed for installation of plastic pipe.

Another great advantage of plastic pipe is that you don't need any elaborate tools. We carried a hack-saw and a screw driver along with us and that's all. It was a matter of about a ½ minute to cut through the pipe with a hack-saw and most of the connections were made up tight by means of a screw-type clamp provided by Triangle. We used galvanized connectors in the larger sizes and plastic connectors, supplied by Triangle, in the smaller sizes. In those few places where we made connections between the plastic pipe and short lengths of iron pipe, the manufacturer supplied us with a plastic adapter which is ideally suited for the job.

To illustrate the ease of installation, we started this job on Thursday at 2 o'clock and with 3 men working 6 hours a day, had the water on all 9 greens at 2 o'clock

AND STILL THE SHOT ECHOES

Lew Worsham (left) and George S. May look over part of the bales of clippings referring to Lew's unparalleled tournament finish of an eagle in the Tam O' Shanter World championship. George is going to have a press clipping bill about as big as the $25,000 first prize Lew won. Engineers of Bell and Howell Co. (motion picture equipment makers) have figured out from the film of Worsham's shot that he holed out, just how long the shot was. Now it's official. The distance was 104 yds.

Saturday afternoon. I figured if we had been laying regular pipe it would have taken 4 or 5 times as long and we would have needed more men.

Not only were we able to save the town money by using plastic pipe, but the ease of installation resulted in very little player interruption.

Another thing I like about Triangle pipe is that it will not rot, rust or corrode. I don't know exactly what the life expectancy is but I've been told that you can bury it and forget it for at least 35 years. That's good enough for me. The fact that the pipe won't rust or corrode also means that you'll be getting a full flow of water at all times. I imagine that if many clubs were to examine their ordinary metal pipe that has been on the ground for some time, they would find it only about 50% efficient because of the accumulation of rust and scale on the inside. This will never happen with plastic pipe.

Light weight of plastic pipe and ease in handling speed installation. Here Van Watson and crew test connections before covering.

This Triangle plastic pipe that we used is made from virgin polyethylene and is perfectly suitable for conveying water for drinking purposes. It would be ideal for carrying water out to the various drinking fountains on any golf course.

All in all, I am very pleased with our decision to use plastic pipe. I would strongly recommend it to any club that is looking for a way to save money.

When you want to get quick action on trade-ins, of odd clubs especially, put these clubs in a barrel in your shop and hang a sign on the barrel advertising them at greatly reduced prices. It's surprising how many of these clubs will be bought by fellows who haven't been having much luck with some club or clubs in their sets.

— Johnny Bass

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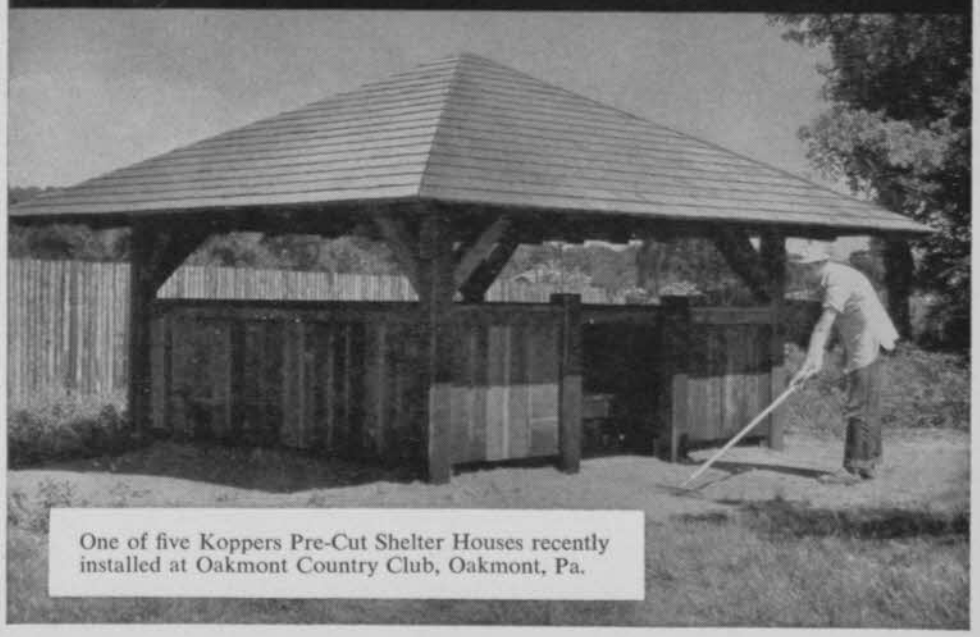

One of five Koppers Pre-Cut Shelter Houses recently installed at Oakmont Country Club, Oakmont, Pa.

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Pre-cut for quick assembly, Koppers Shelter Houses are shipped as a complete unit (all hardware and lumber included). Two men can easily erect a shelter house in three to four days.

Koppers Shelter Houses last three to four times as long as those made of untreated wood, for all lumber has been pressure-treated for protection against decay, weathering and termite attack. Thus, your yearly maintenance and replacement costs will be greatly reduced.

Designed for rustic beauty, these Koppers Shelter Houses will blend with the landscape of any golf course. And they require no painting. Write today for prices and descriptive literature.

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PRESSURE-TREATED WOOD

There are 387 red, green and blue flags on this huge map used by the National Golf Foundation to record the interest and activity in new golf course construction in the United States. This is the record for the first nine months of 1953 and represents 48 new courses completed and open for play, 115 under construction and 224 other prospects or projects being planned.

Big Interest in Planning and Building New Courses

WHEN all of the reports are in, 1953 will be pegged as a big year for golf. Active participation by President Eisenhower and his love for the game has been a healthy stimulant and a contributing factor in creating new interest. A most noticeable increase in women's play is another noteworthy barometer giving support to spot check reports that play in general is up from 10 per cent to as much as 30 per cent in some areas.

The most significant trend, however, is the genuine interest and activity all over the country in planning and building new golf courses. Tabulation of reports by the National Golf Foundation show 48 new courses have been opened for play in the first 9 months of 1953. Another 115 are under construction and there are an additional 224 prospects or projects being planned. This is the greatest activity since World War II and possibly since the 1920's. Foundation figures for 1952 show 38 courses opened for play, 18 under construction and 51 in some stage of planning.

As encouraging as this new golf course construction activity may be, it must be pointed out the sum total of all courses in the U. S. still falls short of the total reported in 1930 and current activity must be doubled or tripled to approach the pace set in new construction during the '20s. Approximately 3700 courses were built from 1920 to 1930 at which time there were 5856. Today the total is 5049. During the '30s many courses were lost or abandoned so that by 1941 there were only 5209. World War II took a heavy toll and although 4809 were reported in 1945 there is evidence the total was below 4700.

There has been a slow, steady growth since the war in spite of ever expanding metropolitan areas and the alarming loss of courses to real estate developments, shopping centers, express throughways, airport expansion and school sites.

The growing interest in the game and the growing population create ever increasing demands on present facilities — so much so the statement has been made 1000 new courses opened tomorrow would play to capacity. What is the answer? More golf courses. Planning and building information can be obtained from the National Golf Foundation, 407 South Dearborn St., Chicago 5, Ill.

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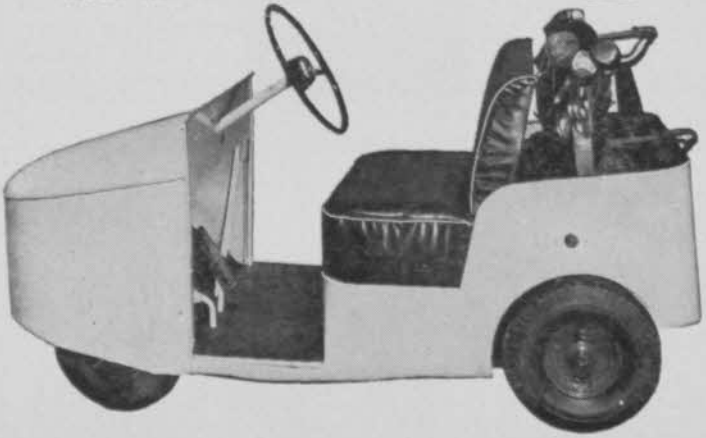

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Walter B. Gerould Elected President of Spalding

WALTER B. GEROULD was elected pres. of A. G. Spalding & Bros., Inc. at the September meeting of the Spalding Board of Directors and will be the chief executive officer of the company succeeding the late William T. Brown. George Dawson was elected vice pres. and member of the Board of Directors; and David G. Christensen, secretary and controller.

Gerould

Gerould was graduated from Cornell University in 1921 and started in the Spalding Chicago store that year as cashier. In 1922, he was shifted to the Pacific Coast Div. in charge of accounting, becoming mgr. of the San Francisco store in 1928. He was elected secy. and treas. in 1939, secy. and controller in 1941, and member of the Board in 1952. Later that same year, he was elected vice pres. and controller of Spalding, as well as pres. of Spalding-owned Toy Tinkers, Inc. Gerould is pres. of the Controllership Foundation and pres. of the Chicopee Betterment Federation. He is also a member of the Longmeadow CC, the Colony Club of Springfield and the Cornell Club of New York.

Dawson

Dawson joined Spalding in 1938 in golf promotion following his graduation from the University of Illinois. In 1938, he became Chicago Retail Store mgr. and, in 1942, Chicago dist. mgr. In 1951, he transferred to New York as assistant-to-then Pres. C. F. Robbins. In February, 1952, he was named national sales mgr.; later that same year being elected vice pres. in charge of sales. He will now be vice pres. and a director of the parent company.

David G. Christensen joined Spalding's Chicago office in 1933 in the accounting department, later becoming mgr. of the tabulating department, continuing as head of this department when he transferred to the Eastern offices. In 1942 he became assistant controller and, in 1952, he was elected secretary and assistant controller. Donald H. Mudd continues as treas. and Charles F. Robbins as chairman of the Board of Directors.

Christensen

TEXAS PRO GETS TEXAS TRIBUTE

In a great tribute to a grand guy, and in a style in line with Texas tradition more than 400 members and friends turned out Sept. 5 to honor Harvey Penick for his 40 years of service to the Austin (Texas) CC as caddie, ass't. and head professional. Texas' No. 1 citizen, Gov. Allan Shivers, shown above with arms around Harvey and Mrs. Penick, was on hand for the testimonial dinner for Penick who, by proclamation of Austin's Mayor C. A. McAden, had been made No. 1 man of the day. In recognition of his long service, high integrity and fine personal qualities the board of directors of the club gave Harvey a full month's leave of absence with pay and made it mandatory that he take such leave. Members and friends presented him with a purse of $3,000, a deserving tribute to a great citizen who has given unselfishly of his services to the men, women and children of his community. An outstanding representative of his profession, Harvey enjoys nationwide recognition as a fine golf teacher, counting many state and national champions among his proteges.