

WESTERN engineers have perfected the illumination of Skeet fields for night shooting in a way which eliminates all glare or "blind" spots, so objectionable in the past. With the Western arrangement, proper lighting is provided for all shooting positions, at a price far

below the cost of illuminating any athletic field of similar size.

Skeet shooting is helping to put many clubs on a year 'round paying basis. Now, with night shooting successfully developed it is even better as a source of extra revenue and as an all-year sport for your members.

Write us for complete details of Skeet shooting, installation of a field, approximate costs—they're low—, and everything needed, including a set of guns for members who do not have their own. Also complete information on Western Master Skeet Traps, the most dependable, most carefully developed equipment available.

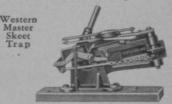
WESTERN CARTRIDGE COMPANY Dept. J-07, East Alton, Illinois





DUCKSKEET—Rapidly Becoming Popular

This fascinating sport was developed to imitate closely the shooting of high flying game, such as ducks and geese. Trap is mounted on a 40foot tower. Wide variety of shotsstraight-aways, crossing birds, or driving over treetops. Blueprints furnished free to clubs contemplating this form of shooting.



GOLFDOM The extreme caution with which green committees and greenkeepers consider their particular watering problems means that golf course irrigation equipment is more painstakingly investigated than any other equipment In view of this, it is significant that their deciused in modern course maintenance. sions have resulted in an overwhelming number of Buckner installations

In 1913

Buckner Invented:

- HOSELESS FAIRWAY WATERING
- Ouick Coupling Hoseless Method
- SLOW MOTION SPRINKLERS

In 1935

Buckner Leads by Years:

- IN PERFECTED EQUIPMENT
- IN IMPROVED METHODS
- IN FOOL PROOF SYSTEMS

BUCKNER SYSTEMS INSTALLED DURING 1935

Olympia Fields No. 2	18	Chicago	Apawamis Club	18	New York
Olympia Fields No. 3	18	Chicago	Fox Chapel Club	18	Pittsburgh
Calumet C. C.	18	Chicago	Pinchurst, Inc.		Pinehurst
Columbia G. C.	18	Minneapolis	Southern Hills C. C.	18	Tulsa
Fenimore C. C.	18	New York	Bethpage G. C. No. 1	18	Long Island
Hyannisport Club	18	Cape Cod	Bethpage G. C. No. 2	18	Long Island
Glenwood G. C.	18	Minneapolis	Bethpage G. C. No. 3	18	Long Island
Lincoln C. C.	18	Lincoln	Bethpage G. C. No. 4	18	Long Island
Lochmoor C. C.	18	Detroit	Highland Park G. C.	9	Florida
Forest Park G. C.	18	New York	North Hills G. C.	18	New York
Rockville C. C.	9	New York	Kissena Park G. C.	18	New York
Monroe G. C.	18	Rochester	LaTourette G. C.	9	New York
Leonard G. C.	18	Fort Worth	Meadowbrook G. C.	18	Minneapolis
Split Rock Park G. C.	18	New York	Bastrop Natl. Park	18	Texas
Pelham Bay Park G. C.	18	New York	Blue Hills C. C.	18	Kansas City
Polvodera C. C.	9*	Kettleman, Cal.	Reno G. C.	18	Reno
Waialae G. C.	18	Honolulu	Wheatley Hills G. C.	18	Long Island

There are nearly four hundred (400) Buckner equipped Fairway Watering Systems

If you don't see what you need advertised in GOLFDOM, write us

SPRINKLERS and VALVES

FOR the third consecutive year, fairway watering carried away first honors as the biggest business building factor contributing to increased golf club revenues. The nominal amount required for an adequate, efficient fairway watering system has made it possible for many clubs to rejuvenate their rosters quickly and increase play and clubhouse patronage substantially.

If you are planning to water your fairways, now is the time to look into

every phase of the proposition, thoroughly. An adequate, efficient watering system for fairways can be properly installed for a reasonable sum these days. For the same amount, or what may appear to be less, an

i.



The Buckner Perfect Curtain of Water Even, regular distribution of water is the prime essential of successful greens and fairway watering. The Perfect Curtain of Water is typical of Buckner performance.

inadequate, inefficient system can be had.

BUCKNER pioneered and developed golf course sprinklers and valves to their present day high point of efficiency. In the complete BUCKNER line you'll find equipment exactly suited for every golf course water supply and pressure condition.

Whether it be the installation of a fairway system, additions to your greens and tee equipment, or the purchase of labor-saving Snap-Valves, we

> can show you how to make your budget gothe - limit in buying power.

> Experimenting is costly in golf course irrigation. We can give you reliable guidance based on years of specialized study and experience. Write today.

BUCKNER MFG. CO. - - NEW YORK, N. Y.

33 West 60th Street (Columbus 5-4565)

240 Plaza Bank Bldg., Kansas City 981 Folsom St., San Francisco, Calif. Rowan Building, Los Angeles, Calif. Factories FRESNO, CALIFORNIA 527 West Mariposa, Altadena, Calif.
7617 Eberhardt Ave., Chicago
215 W. 13th St., Fort Worth, Texas

Deal with GOLFDOM advertisers; they pay for your subscription

LEWIS TEE EQUIPMENT

Standard Throughout the World

... because there are more Lewis Washers in use than all other makes combined. Specify Lewis Washers, Bag Racks, and other Tee Equipment —for just 25 cents additional: turquoise, orange, lawn green, red or jade green.

Lewis Washers (White) 1 to 10. Each, \$6.00. Lewis Washers (White) 11 or more. Each, \$5.50. Complete tee ensemble (White) washer, stake, waste container, data plate, towel and ring, \$10.50.



Lewis Washers-in Color!

Prevents excessive wear

on golf bags - enough

to pay for itself in just

a few years. An attractive addition to

any course: scalloped

aluminum casting set

screwed to 15% galvan ized pipe, 54" long.

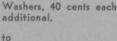
Complete\$4.75

In colors to match Lewis



The Lewis Bag Rack

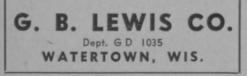
Non-rusting and easy to see and read—to show hole number, yardage and par. Weight 10 ounces. Send score card when ordering. Price, \$1.50 each, plus 10% sales tax. In colors to match Lewis Washers, 10 cents each, additional.





The Lewis Tee Data Plate

Look at the complete line of Lewis Tee Equipment—including: the Lewis Golf Ball Washer, Tee Stake Waste Container, Tee Data Plate, Bag Rack and replacement parts for the Lewis Washer.



GOLFDOM

trusted to carry a grade, but some mechanical leveling device should be used.

Readings should be made first to determine the lowest portion of the slope of the green where the main line is located. Grade stakes are placed at both ends of the main and at intervals of 10 feet along the main, if the system is herring-bone and the laterals are to be spaced 20 feet apart. Starting at the highest point of the main, the grade stake is pounded down about an inch above the soil and the reading taken. If the fall is to be 6 inches in 100 feet we would have a fall of 0.1 feet in every 20 feet or 0.05 feet in every 10 feet. Let us assume that the reading at the first stake is 6.0, then the reading at the next stake 10 feet away should be 6.05, the next 6.1 and so on. (Shown in Diagram 1). There is an increase in the reading figures of .05 feet for every 10 feet. When all grade stakes are set on the main line, the laterals are measured off at intervals of 20 feet on each side of and staggered so that there is a lateral entering the main from alternate directions at each grade stake, or every 10 feet. The angle at which they enter should be less than a right angle and approaching a 45 degree angle. The laterals on each side of the main should be parallel to one another. The laterals should start outside the edge of the green, so that if the tile lines become plugged and the ends have to be opened up to push a cleaning rod through, the turf will not be disturbed.

Accurate Grading Needed

The grade should be determined at the point where these laterals begin, by measuring the distance between that point and the grade stake where they enter the main, allowing 0.1 feet for each 20 feet. (See diagram). Grade stakes should be driven in to the correct readings as was done on the main line. We must now get some device to guide us in digging the ditch to the correct grade. Probably the best method known is termed the Line and Gauge method. Stakes of 2 in. x 2 in. material 4 ft. 6 in. long are driven down at each grade stake so that their tops are 3 ft. 6 in. above the grade stake. A line is stretched along the top of the stakes.

The main line should be dug first and then the lines stretched from the ends of the laterals to the point at which they are to enter the main. This line will show the grade of the bottom of the ditch and is

OCTOBER, 1935

just 5 feet above it, if the tile are to be placed 18 inches below the surface. If they are to be deeper, the depth should be subtracted from 5 feet and the stakes carrying the line driven in so that they are that distance above the grade stake. The edge of the ditch should be about 6 inches away from the grade stakes, so that the line will not be in the way while working. A gauge is made in the form of a capital L upside down. One arm is 2 feet long and the other 5 feet from the end to the lower part of the horizontal arm. The grade of the bottom of the ditch is obtained by placing the end of the upright part of the gauge on the ditch bottom and noting whether the horizontal arm touches the line. When the underside of the arm just touches the string, the ditch is on grade. Care should be taken to see that the gauge is held vertical or some error will result.

For Ditching

Hand Labor Is Best

The ditches should be dug by hand and a good tiling spade provided. The last part of the ditch should be taken out with a ditch cleaner, which shapes the bottom of the ditch to fit the tile. The tile should be laid with a tile hook, or by lying down and placing them in the ditch by hand. Walking in the ditch spoils the shape of the bottom and walking on the tile moves them out of position. The tile should be placed close together as possible, and any wide joints should be covered with broken pieces of tile.

The ends of the laterals at the edge of the green and at the starting point of the main line should also be covered with pieces of broken tile to keep the soil from entering them. It is also a safeguard in sandy soils to place an inverted tough sod or piece of tar paper over the joints. In order to prevent crumbling in of ditches or sinking of fill, the tile should be packed with cinders to within 8 inches of the top in clay soils, and 1 foot in sandy soils. If the green is to be sodded or planted, a few inches of soil should be placed on top of the cinders and watered down thoroughly, adding a little more soil and watering it down. This procedure should be repeated until no more settling is noticeable. It is important that this method or some similar one be used to settle the soil before planting, otherwise depressions will be found where the tile lines are laid.

THE MAKERS SAY

UNITED STATES RUBBER CO. comes up with a golf ball Christmas deal that will do business for pros this year. There are three sizes of boxes; for 12, 6 and 4 balls. The boxes are striking, beautifully designed jobs, made of gum wood, cedarlined and finished with a brilliant Christmas red lacquer that stands out and adapts itself to any color scheme.

For cigar and cigarette humidors for men and as trinket boxes for women the boxes have a strong appeal and utility. A wide range of U.S. balls is offered. In the 75c balls there are US Royal-Spun Latex, US 444, Royal P.G.A. Championship, Royal P.G.A. Tough Cover; and the US Fairways in the 50c class.

Suggested retail price for the 75 cent balls packed in the dozen size gift boxes is \$9.75; in the six ball size, \$5.00 and in the four ball box \$3.50. On the 50 cent US Fairway the retail prices suggested are 6.75 for the dozen ball box; \$3.65 for the six ball box and \$2.50 for the four ball box.

Pro margins on the Christmas packages are good, with the pros getting the packages for less than they cost US.

"An important thing about this Christmas ball selling," says E. C. Conlin, US Rubber golf ball sales manager, "is for pros to get started early and to put special attention on sales to their members who are corporation officials. These men do much gift buying for their employees and business friends. Shopping is a problem to them and their pro can get into their offices when other salesmen would find entry almost impossible.

"The pro profit from effort and brains on the Christmas boxes comes in at a time when most pros can use money. It's a field wherein the pro shouldn't put off his work but ought to start strong early in November."

WILSON SPORTING GOODS CO. again sets before the pros a combination of Christmas selling packages for golf balls that ought to score even stronger than the Wilson gift line-up last year and that went to town for the live boys. There were pros who sold Wilson balls up to the 100 doz. mark with the 1934 Wilson ball Christmas package proposition.

ball Christmas package proposition. One Wilson Hol-Hi twelve ball gift package is a handsome box for men in which cigars, cigarettes, handkerchiefs, dress jewelry or other knick-knacks may be stowed. This box has, in addition to the balls, three sports handkerchiefs. Another Hol-Hi dozen ball deal has six handblown When 200 of the fussiest players all say the greens are magnificent

what does it mean?

That's what happened at the National Amateur Championship played over the course of the Country Club of Cleveland.

• This sort of an endorsement means that expert greenkeeping has made resultful use of proper composting on those greens.

• At the Country Club of Cleveland Bert Sheldin, veteran practical authority on course maintenance, has a ROYER COMPOST MIXER that he keeps busy in providing a generous, economical supply of proper compost.

• His development of greens during the five years of the present Country Club course has been nothing short of marvelous, and is striking evidence of the value of good compost.

• The ROYER MIXER prepares compost out of moist material, coarse and pebble-laden material—any sort of material

The advertisers pay for your GOLFDOM; deal with them



View of the Country Club of Cleveland during the 1935 National Amateur Championship.

> This is the ROYER with which the Country Club of Cleveland makes its compost.

from which first-class compost can be made. It makes compost speedily, cheaply and of uniformly fine character.

• You have to have plenty of good composting to make great greens—AND YOU HAVE TO HAVE A ROYER TO MAKE GOOD COMPOST THE RIGHT WAY.

• When you greenkeepers and chairmen make up the budget for 1936, see that it provides for a ROYER and you'll be using that part of your budget to pay great dividends in player satisfaction and operating thrift.

• The ROYER is sold thru leading golf equipment dealers. They will supply you with complete details of the ROYER, or we gladly will furnish you the information direct.



glasses, each containing two balls and the lot of them packed together. There is a third Hol-Hi deal with a dozen balls packed in a chuck-a-luck cage, including dice and playing cloth, and a fourth offer of roulette wheel and cloth.

For the women there are twelve Helen Hicks balls packed in a beautiful makeup box. This is something the gals and their boy friends will go for. The choice of containers for the gift propositions on the Wilson balls this holiday season open up a market that hustling pros will get to work on energetically.

A. G. SPALDING & BROS. helps pros put in a strong bid for gift business by a couple of Christmas cards that have a great record of producing business last year. Spalding supplies each pro with as many as he wants of each card. One card carries a message to members' wives. It's headed "Let us tell you about your husband." The other card is headed "Got a golfer on your gift list?" Both cards are printed attractively in Christmas style. Neither card mentions Spalding, but are to go out over the pro's signature.

Pros are urged to order these cards from their nearest Spalding branch quickly. The Spalding organization advises pros to do up all gifts from the shop in special Christmas wrappings and to arrange to make deliveries from the pro shop Christmas morning.

Naturally Spalding clubs and balls fit right into the Christmas card solicitation so the outfit cashes in nicely along with the pros who mail these cards early to their members and their wives.

ACUSHNET this year will have as a Christmas wrapping dozen and half-dozen boxes for their balls. Attractively made and finished cedar boxes will be the Acushnet gift containers.

THE PENFOLD ORGANIZATION, 67 W. 44th St., New York City, has been appointed American agents and distributors for the new Jack White woods and irons, now being made under White's personal supervision at Gullen, Scotland, Milt Heyman announces. New designs are used for all wood heads and the irons will introduce two new styles—one known as the "Sit rite" and the other with a corrugated back, all hand forged, of course, and rustless. The Jack White line will be sold only through pros.

RUSS SODA FOUNTAIN CO. succeeded in working out a self-contained draught and bottled beer service unit for small space, in which the Russ rapid-cooling method is employed. The method is

said to eliminate practically all beer waste and produce an extra clear profit of from \$1.25 to \$2.00 on every half barrel. Ice is used in the refrigerating compartments.

FATE - ROOT - HEATH CO., PLY-MOUTH, OHIO, reports an excellent sales volume this season on its Silver King tractor. "The Silver King is our conception of a universal tractor for golf course work," says John A. Root, president. "The tractor has light weight, flexibility, ade-



quate power, remarkable economy of operation and minimum repair needs. Greensmen who operate the Silver King will back up every one of these claims."

The Company has an interesting descriptive folder, which will be sent on request.

SPALDING PGA balls, intended for the Christmas trade, will be coming through in special Christmas box wrappings. The wrapping has plenty of eye appeal and admirably conveys the holiday spirit.

JOHN BEAN MFG. CO.'s new line of Armored Royal all-steel sprayers with many new construction features, met with such unusual favor that this line is being extended for 1936 into the medium capacity field. These medium capacity sprayers will be of particular interest to golf trade because of their compact construction, easy hauling, and pump and engine capacity in the range regularly used for golf course work.

These outfits are all suited to continuous operation for pressures of from 400 to 600 pounds and with proper type nozzles this higher pressure forces the chemicals for treatment of greens and fairways, through the turf and to the roots without opportunity for wastage of materials.

New catalogs describing this complete line of equipment will be ready for mailing November 1st and a card to GOLFDOM

GOING TO CHICAGO? Stay at the Home of Golfdom's Elite



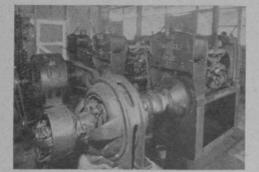
FOR the same reasons that appeal to celebrities of the golf world, we believe you will find the MORRISON HOTEL Chicago's ideal stopping place. Just an easy brassie shot from almost everything in downtown Chicago, yet the quiet of your quarters at the MORRISON takes you as far from the city's hub-bub as a shady fairway on a lazy afternoon.

THERE is a feature at the MORRISON to gratify your every whim. Rest, relaxation, amusement, famous restaurants, shops—really a small city under one roof.



Thanks for telling the advertiser you saw it in GOLFDOM

60



At Sulphur Springs, Fla., these three Mc-Cormick-Deering diesels operate generators to supply power for lighting and operation of motors in a 100-room hotel, 15 apartments, 8 stores, 2 restaurants, 6 residences, 16 other electric refrigerators, a gasoline filling station, a 25-hp motor which fills the town water tank, and illumination for a swimming pool and 250 bath houses. Maximum load is 80 kilowatts. This set-up indicates the efficiency and economy of diesel power for club purposes, for which a much smaller unit than the above would meet all club demands.

or direct to the John Bean Mfg. Co., at Lansing, Mich., will bring this descriptive circular and prices.

THE MONROE COMPANY, COLFAX, IOWA specializes in equipment for golf courses having sand greens. One of its most interesting and practical items is the Permanent Putting Path, a fast accurate putting surface 2 feet wide which is installed from cup to back edge of sand greens. Installed in this location it permits heavy sand to be used on the rest of the green so that pitches will stick. On the path, the sand is regulated to give putting resistance equal to the finest bent greens.

The company issues a complete catalog of sand green equipment and supplies, which will be sent on request.

BERNARD GLOEKLER CO., 1627 PENN AVE., PITTSBURGH, kitchen equipment manufacturers, is pushing two new items in its line these days—a new 5 by 3 foot range, and the "Millrace" dishwashing machine.

The range—model 536B—has a wrought iron top with nine burners on the cooking surface, or five burners if a griddle and broiler are desired. The two ovens are of different sizes—one 22x22x14½ inches, the other 26x22x14½ inches. Oven bottoms are cast iron and have roast-pan rests to keep pans from direct contact with oven bottom. Economy of operation and full use of every burner of the cooking surface are the outstanding features of this range.

GOLFDOM

The dishwasher recommends itself to country clubs because of its economical water requirements. Where many vertical type dishwashers of 4,000 piece-per-hour capacity use 8 to 12 gals. of water per minute, the Millrace will handle the same number of pieces while consuming only $\frac{1}{2}$ gal. of water per minute. This water economy means soap powder economy too; the makers state only $\frac{1}{2}$ cups of powder are needed for $\frac{1}{2}$ hours of washing. The machine can be heated either by gas or steam, and the motor consumes power equal to one 40-watt lamp.

THE HOWELL CO., ST. CHARLES, ILL., designers and makers of metal furniture, will shortly have ready for distribution to interested club officials a new 36-page catalog of new items developed for the Howell 1936 line of modern chromesteel furniture. The new items include upholstered suites, occasional chairs, cocktail tables and small occasional tables. All were designed by Wolfgang Hoffman, noted furniture stylist.

Golf and country clubs planning to refurnish and modernize clubhouses will be sent a copy of the new catalog on request.

WORTHINGTON MOWER CO., STROUDSBURGH, PA., has taken over operation of the famous Shawnee CC at Shawnee-on-Delaware, as a field testing and experimental course laboratory.

PORTABLE ELEVATOR MFG. CO., BLOOMINGTON, ILL., makers of Little Giant Spreader, advise that no major changes will be made in this popular greenkeeping machine for next year. There will be a few refinements, but in



the main the device will need no changes to continue to perform its job rapidly, accurately and without discrimination as to material to be spread. Rugged construction, non-clog, easy adjustment for amount of material per given area, simple attach-