Mr. Golf Pro ~ ~ ~

"Yes sir, Mr. Pro., we're here again, all dolled up in a new package and new counter display rarin' to go. Just let your golfers have a look at us, say Yello, and we're hopping right into their hands. We'll bring home the bacon to you."



The new package and counter container will sure enough pep up Yello Tee sales. And it's all free to you with your initial order for a gross of Yello Tee packages.

Order from your wholesaler.

MORLEY BUTTON MANUFACTURING CO. PORTSMOUTH, NEW HAMPSHIRE



The advertisers pay for your GOLFDOM; deal with them.

THE NEW "OVE

. A new and perfected roller unit in gang formation.

A product that carries every improvement that long tests and many leading greenkeepers could suggest.

Leaves no mark on even the most delicate turf and is of such amazing efficiency as to be out of the reach of competition.

Has a total cutting swath of nearly four feet.

Will cut an average green of 6000 square feet in ten minutes. As a time and money saver nothing approaches this performance.

Eight blade high speed reel.

Newly designed grass boxes catch all of the cut grass, wet or dry.

Alemite lubrication.

Highest grade of material used throughout.

Worthington M

THE LARGEST MANUFACTURERS, C

Main Office and Factory ~

Bra	nches	s :	Chicago Office and Warehouse: 517-21 So. Laflin Street							Montreal: 132 St. Peter Str				
			Boston: 1 State St.							Los An 2341 W. Wa				
A	G	B	N	С	I	E	S	I	N	A	L	L	•	-

Only reliable companies are allowed to advertise in GOLFDOM.

MARCH, 1931

RGREEN SCOUT"

For going from green to green the units rest upon rubber tire carriers.

The "Overgreen" can also be supplied with cutting units of the high wheel type.

Although cutting the greens is known to be the most expensive operation in golf course maintenance the adoption of the Worthington "Overgreen" reduces this cost to an almost negligible quantity.

No club or greenkeeper in these days can afford, from an economic standpoint, to disregard the claims of this great time and labor saver.

The Worthington gang mower was first on the fairways and is first on the greens!

WRITE FOR FULL PARTICULARS

ower Company

F. GANG MOWERS IN THE WORLD

Stroudsburg, Pennsylvania

Cleveland: Hippodrome Building San Francisco: 52 Beale Street

- p

New York: 11 East 44th Street Portland: 384-386 E. Madison St.

E

S

R I N C I P A L C I T I

When you mention GOLFDOM the advertiser knows you mean business.

Arrays Authorities in Presenting Virtues of Mineral Fertilizer

By R. J. H. DeLOACH

COME years ago the English botanist, Dr. George Henslow, in writing on the origin of floral structures, said: "Tt will be gathered that colors, per se, are a result of nutrition,-of a more localized flow of nutriment to the positions in question." About the time that Henslow made his observations, other students in various parts of the world were working along similar lines and had come to the same general conclusion that nutrition is the chief factor in the modification of plant life. This discovery was found to have a fundamental effect on the growing of plants for economic and aesthetic purposes. Scientists immediately took up the study of plant growth from this point of view, and since then, many of them have devoted a lot of time to a study of how certain minerals relate plant life to the energy of the sun's rays. A passing review of these interesting studies will help us to get a clearer idea of the function of minerals in the life cycle of growing plants. It will help us to answer the question as to why minerals are used in the manufacture of fertilizers.

Plants assemble the simplest elements of the earth into complex organic matter. They constitute the part of the living world first removed from the mineral kingdom. In fact, plants constitute the natural bridge between the mineral kingdom and animal life, and we are told that all food which nourishes animals and man, and makes life possible comes originally from a union of water and a simple gas, carbon dioxide, in the leaves of green plants.

The process by which the plant makes use of the sunlight and the minerals of the earth to combine the carbon of the air and the water of the soil and make organic matter is called *photosynthesis*. Of this peculiar process, Dr. E. W. Sinnott, the botanist, elaborates further on this mysterious power in nature as follows: "The materials combined by the plant in this process are but two—water and carbon dioxide; water is absorbed from the soil by the roots, passes upward through the stem, the peticle and the veins of the leaf, and thence enters the mesophyll (or leaf blade) cells. None is obtained by the leaf directly from the atmosphere. The carbon dioxide used is derived entirely from the air. No other carbon compounds. not even the abundant supplies present in the complex organic materials of humus can apparently be drawn upon by ordinary green plants. Carbon, oxygen and hydrogen, together with the seven essential elements derived from the soil, constitute the necessary chemical basis for plant life." Some plant physiologists report that plants get some carbon from the soil, but what they get from the soil is not significant when compared with what they get from the air.

Plant Makes Its Own Organics

Mineral plant foods form the connecting link between the carbon of the air and the water in the soil. They are so indispensable that plants cannot grow without them. Furthermore, plants cannot get these minerals from any other source except the soil, nor in any other form except in the soil solution. Therefore they must either exist already in the soil, or must be placed there to enable the plant to manufacture organic compounds. The health and beauty of a plant may be greatly improved by balancing the minerals in the soil, and plants always have signs to show soil deficiencies. Most soils are deficient in one or more of these mineral elements. Four elements frequently lacking in average soils are: phosphorus, potassium, calcium and nitrogen. If these are supplied, the problem of organics is solved. A11 soils rich in minerals have an abundance of organics, if plants grow there, and the quickest and cheapest way to supply organics is to supply minerals; with these the plants will in a short time be able to fill the soil with organic matter. The carbon of the air is never lacking. The water of the earth is in certain places and at certain times the limiting factor. The most frequent limiting factor is a proper 0

USE NAGA to control grubs and worms — to deter weed growth, too!

Prominent greenkeepers all over the country insist upon Naga—the *tested* Sherwin-Williams turf protector because it is *threefold* in its benefit to greens, tees and fairways!

Not only does Naga control the expensive ravages of grubs and earthworms, but it also actively deters the growth of weeds and at the same time stimulates the growth of Bents, Bermuda grasses and certain other fine turfs.

Read these reasons why:

Naga contains 2% more Arsenate of Lead to the pound than ordinary Arsenate of Lead.

Naga covers more turf per pound because it is fluffy and ground extremely fine; 99.5% passes through a silk screen of 350 mesh to the square inch.

"Not a Grub Allowed"

NAGA NAGA NAGA

Grubs and worms are sure to get an *effective* quantity of this fine material. Their mouth parts are very small and cannot swallow a coarse material.

Naga mixes perfectly with Sulphate of Ammonia and other approved fertilizers but is not recommended for Poa Annua.

Write for more information on Sherwin-Williams Naga. Greenkeepers of leading golf clubs acclaim it as the safest, surest protection against these pests.

Send for valuable free pamphlet giving¹full instructions for grub and earthworm proofing.



"Standardize"

It's a certain sign of good greenkeeping

Every item in the "Standard" line helps the greenkeeper present his course perfectly groomed

In trim appearance, durability and moderate cost the "Standard" course equipment meets every requirement of the knowing greenkeeper and his chairman.

These five pages illustrate, describe and give net prices on the complete "Standard" line. Note the up-to-date designs, quality of materials and reasonable prices. Check your needs with the "Standard" items shown. Meet your budget requirements by buying dependable "Standard" equipment of known high quality. Standardize on "Standard" equipment for Permanancy, Satisfactory Service and Economy.

The season is just around the corner. Have your equipment ready. Dress up your course with "Standard" equipment. **Place your order today.**

STANDARD MANUFACTURING CO. CEDAR FALLS, IOWA

The name of our nearest distributor will be gladly sent on your request.

A BETTER HOLE CUTTER — At a Lower Price

Greenkeepers have long wanted a Hole Cutter that cuts true and clean that is easy to operate and one that is built ruggedly enough to insure years of perfect satisfaction and operation.

The newest addition to the Standard Golf Course Equipment Line fully meets the requirements of every Greenkeeper—many exclusive construction features guarantee perfect performance under the hardest possible usage.

The Standard Hole Cutter, with its accurate, strong, rugged construction, always cuts true—every hole is even and uniform in size. The cup fits in evenly and snugly without extra effort or work.

CUTS

TRUE

7 Features of the CUTS TRUE

- Expeller foot plate made of heavy steel—riveted and welded to expeller rods. Will not bend, become loose or get out of line.
- 2 Expeller disc fits snugly to inside of rim. Eliminates clogging.
- 3 Exclusive design, three point cutting edge of hardened steel. Imparts slicing cut and works either direction. Cuts easily and stays sharp longer.
- 4 Guide pin exactly in center-special construction keeps it there. Hardened alloy steel.
- 5 Rim size conforms exactly to U. S. G. A. regulations. Hardened entire length to scour easily. Cuts true and clean.
- 6 Expeller guide and shaft socket welded in place for accurate and constant fit.
- 7 Expeller rods welded and riveted at both ends. Rigid and strong enough to withstand the most severe usage.

Price, complete \$7.00

STANDARD **JOIT**

STANDARD STEEL FLAG POLES

This distinctive pole is constructed from a special, strong, light weight seamless tube, 34" diameter, strongly reinforced at the bottom. (See below). This tube is formed into a beautiful spiral design and thoroughly galvanized. Aluminum ferrule at bottom. Equipped at top with brass rings spaced for attaching standard flag 14" x 20". Furnished for other sized flags without extra cost if specified when ordering. Attractively finished in two color combinations, Red and White or Orange and Black. Swivel illustrated at left is easily attached to these poles. Made from Duralumin and works perfectly. Keeps flag from wrapping about pole.

The color combinations make these poles visible against any back-ground, their lightness in weight eliminates injury to the putting green and their rigid construction makes them strong enough to withstand continual usage.

Price List-"Standard" Steel Poles

 Flag Poles, each
 \$2.00

 Swivel for above poles, each
 .25

 Flag poles furnished 8 ft. long, 11%" or 1" ferrule—two color combinations, Red and White or Orange and Black. Furnished 1%" ferrule and Red and White unless otherwise specified.

NEW CAST ALUMINUM HOLE RIM

A hole rim scientifically designed and cast in one piece. Absolutely true and of correct standard size. Outside of rim is smooth and made with a slight taper for ease in inserting and extracting from the hole. Wall is thin with top inside edge rounded to eliminate rebound of the ball when putting. Smooth inside—cannot injure the hands. Ball receptacle strongly reinforced sloping to the center and with holes for adequate drainage. Pole socket is long and rigidly braced to always keep the pole in a straight upright position. The "Standard" Hole Rim is rust proof, moisture proof and self draining-

will not corrode and always maintains its perfect circumference. No other rim fits so perfectly or will last so long. Also is furnished in cast iron.

Price List "Standard" Hole Rims

Made of galvanized steel with easy fitting metal handle, price each\$.60

Special Feature

The illustration at the lower right hand corner shows plainly the unique method of reinforcing "Standard" Poles. This greatly strengthens the pole at the point of greatest strain and also eliminates the possibility of loosening of the ferrule.



PERMANENT AL COURSE



"DO AND DON'T" SIGNS

Guests, and other visiting players appreciate the convenience of sufficient signs to apprise them of distances, directions, local rules and regulations. They eliminate both playing delays and embarrassing situations.

While unobtrusive, they are easy to read quickly and their cast aluminum construction assures weather and wear resistance. Raised lettering on both sides of 5½" x 14" plate makes them readable from all angles. Each sign furnished complete with easily removable and replaceable galvanized stake avoiding interference with mowing. A well kept course is a well marked course. Any similar wording you wish.

Price List "Do and Don't" Signs Complete, each with stake......\$2.50

SIGNS

PARKING REGULATION SIGNS

Parking on the drive is a problem of practically every private or public golf course. A few signs like this one will go a long way toward doing away with this nuisance.

The plate is 12" in diameter made from cast aluminum with raised lettering on both sides. The base is heavy cast iron, 11" in diameter, and not easily tipped over. You may specify any similar wording you require. Furnished complete with base and post as illustrated.

Parking sign complete



4" x 7½" cast aluminum plate, 3" lettering.

PRICE

Fairway Yardage Marker

......\$8.00

Carries raised figures on both sides so as to be easily readable from any position when sign is set at right angles to edge of fairway.

Any yardage or distance.

UMINUM GOLF SIGNS

ENTRANCE SIGNS



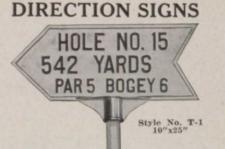
Style No. E-1, 18" x 24"

Just what you want for your club entrance. With any lettering or special design you want. All signs cast of solid aluminum with raised letters.

Entrance Sign Price List Entrance Sign Price List No. E-1--Plate only, any wording....\$10.00 No. E-2--Plate only, any wording....\$12.00 Galvanized tubular sign post, size 2" x8 ft., equipped with ball top, an-chor rod and fittings for attaching plate, each\$3.00



Style No. E-2, 24"-25"



There's a place for direction signs on every course. Cast aluminum plate with raised lettering on both sides, furnished complete with 2" x 8' galvanized tubular post equipped with anchor rod. WITH OR WITHOUT BAG RACK (illustrated on next page). Any wording you wish.

Price-Style T-1 Sign Complete with post, each..... Bag Rack, extra.....



Double faced direction signs. Shows the way to the next hole. Cast aluminum. Complete with 2" x 8' galvanized tubular post with anchor rod, any wording.

Price, each, Style T-2..... \$8.00

Tee Markers

ARROW STYLE WITH HOLE INFORMATION

A Tee Marker that serves a dual purpose. Shows driving location on the tee and line of play and provides information regarding the hole. Made entirely of cast aluminum with raised letters 4 and cast spikes. One marker with wording "Replace Turf" on left of tee and one with special wording on right of tee is usual

combination.



Arrow Tee Marker Size 5"x11"

Price of Arrow Tee Marker with special wording, each.......... Price of Arrow Tee Marker with wording "Replace Turf", each...\$1.50

MUSHROOM STYLE

These Tee Markers are self-polishing, (scuffing brightens them). Cast with direction arrow to indicate line of play. Rust-proof, one-piece cast aluminum, ventilated; will not injure grass.



Price List Aluminum Tee Markers, pair

ATTRACTIVE AND PERMANENT

PRACTICE GREEN MARKER

Number plate cast aluminum with 2" letters. Rod and weighted base gal-vanized. A marker easily readable that picks up your ball. Weighted base keeps marker in upright position and will fit any cup. Finished natural aluminum background black letters, red background aluminum letters, or orange background with black letters.

Price, each, complete \$1.50

BAG RACK AND DIREC-TION SIGN

The Bag Rack and Direction Sign provides complete information regarding the hole and a convenient rack for bags. Sign plate same as illustrated on the inside, No. T-1. Rack is cast aluminum 20" diameter with space for eight bags. Top edges rounded to prevent damage to the bags. Will fit any 2" O. D. post or can be furnished complete with galvanized post with ornamental ball top.



Price Style T-1 Sign and Bag Rack

"Standard" Products Guaranteed

All "Standard" Golf Course Equipment is fully guaran-teed by the manufacturer. These accessories are fine enough for any Club yet the reasonable prices permit them being used by even the smaller Clubs.

Every item of this "Standard" line brings you the latest design, quality material and expert workmanship. Their use is what every Club needs to lower upkeep expense and to make playing more pleasant.

SPECIAL SIGNS

We are in an excellent position to furnish special signs when required. If the list of signs illustrated does not fulfill your needs, advise as to your requirements and we will gladly submit suggestions and quotations.

Illustrated above is the combination of Direction Sign mounted with Bag Rack. Can be furnished separately when desired.

HOLE NO. 15 542 YARDS

PAR 5 BOGEY 6

"Standard"

Racks also fur-nished with gal-vanized post with ball top.

Bag

"Outlasts All Others"

MANUFACTURED BY

STANDARD MANUFACTURING CO. CEDAR FALLS, IOWA

Be sure to read about the new CUTS TRUE Hole Cutter on Page 76