



Inexpensive, positive, easy to use

Take no chances with grubs and worms this year. The ravages they make cost your club heavily in money and your pleasure of the game.

Prominent clubs all over the country use Naga for positive control of grubs and worms on tees, greens and fairways. They know that Naga contains superior protective qualities.

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.

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.

In addition to its protective qualities, Naga is detrimental to the growth of many weeds. It stimulates Bents, Bermuda grass and other fine turfs. May be used with Sulfate of Ammonia and other approved fertilizers.

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 giving full instructions for grub and earthworm proofing.

The Sherwin-Williams Co.

Dept. 716, 601 Canal Road, N. W.







Armour's

TURF

produces thick builds proper root

Glenview Golf Club, Golf, Illinois

Directions for the application of Armour's Special Turf

The initial spring application, applied broadcast, as early as possible and before growth starts, should always be a complete fertilizer. Armour's Special Turf Fertilizer, 400 to 800 pounds per acre on fairways and 20 to 30 pounds per 1000 square feet on greens, will produce the desired results. On the greens a soluble nitrogen carrier should then be applied during the season as required.

Fertilizer

Summer and early fall application on established turf of Armour's Special Turf Fertilizer is best made in compost at the rate of 30 pounds of fertilizer per yard of compost to prevent any danger of burning.

In new course construction and the rebuilding of holes, Armour's Special Turf Fertilizer should be uniformly broadcast 1000 pounds per acre and promptly harrowed in a few days before seeding.

In starting new turf, a heavy fertilization of all fairways and greens before seeding enables the architect to control chemical soil reactions so that dandelions and wide-leaved growths will not develop and fine grasses will thrive. Much time and money will be saved by this procedure as it is much easier to get the soil in proper chemical condition before seeding than it is to correct a bad soil condition after the ground is covered with poor turf and many weeds.

It is a waste of time and money to continuously reseed soils that are poverty stricken and too alkaline to grow good weed-free turf.

Life to grasses, death to weeds
... this you can now get in
a single fertilizer. For by supplying balanced fertility to paralleled-veined, narrow-leaved plants
(the grasses), Armour's Special
Turf Fertilizer nourishes sod. At
the same time it forms chemical
residues which unmercifully
strangle broad-leaved weed plants.

An extra-fine feature of Armour's Special Turf Fertilizer is its varied and balanced turf nourishment. There is not only an ample supply of nitrogen, but also of phosphoric acid and potash in just the right amounts to balance its nitrogen-content. This combination insures luxuriant growth of grass . . . a hardy, drought and disease-resistant sod . . . a turf that will stand up under wear and tear right through the middle of the summer. Armour's analysis 10% of nitrogen (12% ammonia) to 8% of phosphoric acid and 6% of potash.

Special

FERTILIZER

healthy turf...

structure... checks weed growth.

Use Armour's Special to bring your course to life. Let it be nurse-maid to your fairways. You won't need a weeding gang any more. Follow the instructions for application printed on this left-hand page. The wages you'll save on hand weeders alone will go a long way toward paying for

an Armour's Fertilizer program. But if your club can't afford a full program, treat the spots that need it most. And repeat, until your entire course is in top condition.

The coupon below properly filled out and mailed to us will enable us to assist you with your turf problems.

Armour Fertilizer Works

FILL OUT AND MAIL TO-DAY

111 W. Jackson Blvd., Chicago, III.						
Gentlemen:						
☐ Our course is composed of approximately acres. Soil is sandy ☐						
loam clay loam black loam . It was last fertilized in192						
withpounds per acre of						
ered to railroad station at(town)(state). □ Please ship lbs./tons Armour's Special Turf Fertilizer via:						
StreetSigned						
P. OClub						
State Office or Position						
☐ Name of your foremost fertilizer dealer						

nore BUCKNER SPRINKLERS VALVES

are in use on golf courses in United States than all other makes of sprinklers and valves combined. Only superior performance could

create this overwhelming preference.

We originated full golf course irrigation—the slow motion sprinkler—the hoseless system—the self closing snap valve for hoseless systems—and now, we offer phenomenal improvements for 1930.

> Write your nearest dealer, listed below, or direct to factory, for literature.

BUCKNER'S California Hoseless Systems

GOLF KING No. 6 Sprinklers

GOLF KING Valves

SELF CLOSING **Snap Valves**

Plan your hoseless system now!

BUCKNER EQUIPMENT IS STANDARD THE WORLD OVER

LEADERS IN THE DEVELOPMENT OF SPECIAL SPRINKLERS FOR GOLF COURSES

J. Oliver Johnson, Inc. Chicago, Ill. Philadelphia Toro Co., Philadelphia, Pa.

New York Toro Co., New York City

SPECIAL REPRESENTATIVES H. V. Carter Co., San Francisco, Calif, Guy R. Champlain, Paris, Ky.

Joseph P. Breck & Sons, Boston, Mass. Huey Philp Hardware Co.,

Ivan W. Lee, Seattle, Wash. Lee Golf Equipment Co.,

Dallas, Texas - - - Chicago, Ill.

EASTERN ENGINEERING REPRESENTATIVE: Wendell P. Miller & Associates - - - - Columbus, O.



Here is something the greenkeepers may see during their convention at Louisville. It's a winter view from the tenth tee of the Louisville C. C.

to each green. The Paris green effectively eradicated grub worms, commonly known as the Army worm, and various other forms of insect life. Bermuda stolons were then planted and rye grass seed was worked into the soil with a gang of spiked rollers. The cottonseed meal and lime stopped the sand from blowing away and gave a firmness to the soil, if you could call it soil, because it is practically all clear white sand.

Having learned that other Florida greenkeepers were using tankage and black swamp muck, the writer decided to use a fertilizer which had given good results in the north, so we applied one hundred to two hundred and fifty pounds of this fertilizer on each green and kept these greens wet for the following two weeks, after which they were sprinkled each night.

The reader will understand that a new green in Florida, unless it has a foundation of clay, dries out within five hours from the time the sprinklers stop, so we

kept the sprinklers working day and night for the first two weeks. The same fertilizer was used on the tees and approximately 750 pounds were spread on each 70 linear yards of fairway.

My experience on this job, which had to be done in a hurry, convinced me if I should ever build a new course in Florida, I would find some clay before building the greens and if possible secure clay to mix with the sand on the fairways. If one should be able to secure clay for the base of the greens, that is about 12 inches below the surface, 75 per cent of the moisture would be retained instead of passing through the sand as it does and leaving the young grass roots without very much nourishment. Lacking this clay, it is necessary to use as much cottonseed meal, lime and such fertilizer that we could obtain, to make the grains of sand stick together and hold some of the water,

Protect Against Souring

Due to the fact that so much water is necessary to keep the roots damp, the surface of the ground is inclined to become sour from this constant sprinkling but the moisture of cottonseed meal and lime corrected this condition through applications made every two weeks. We always included the Paris green in this mixture to keep out the grubs and bugs.

The sand seems to have a lot of food required for turf life, but it is so porous that grass cannot live until it has rooted itself six or eight inches below the surface and it cannot root itself unless the sand is kept moist. Chemical fertilizers are of some value because they seem to make the sand pack about the grass root, however black dirt.



Another Louisville C. C. winter view.

Looking from the tenth tee.

down here, is almost as valuable as gold.

I would say if any greenkeeper can obtain sufficient clay, black dirt or a fertilizer which will make the grains of sand stick together, then keep this so-called soil damp enough to permit of seed germination and growth for about two months, he will have no trouble in securing a dense turf for the reason that the sunshine is there day in and day out. When he has used Paris green in the proportion of three pounds to 200 pounds of cottonseed meal and lime mixture, there will be no bugs, worms or vermin to destroy his turf.

It is natural, however, to expect that angleworms will accumulate as the putting green soil becomes thicker and richer, but they are easily removed and the greenkeeper may rest assured that he has a good turf when angleworms are found in it.

We made another application of our northern fertilizer this last fall even though the Bermuda grass had matted very closely on the fairways, with the result that many golf players who live in Miami the year round are coming to Fort Lauderdale because they tell us the turf on this course is of such unusually good character. A second application of this northern fertilizer was placed on the putting greens and Italian rye grass sown on the greens November 1st to 5th so that on December 1st the putting greens compared very favorably with those on our metropolitan area golf courses.

The sum and substance of this experience merely proves that a good turf is dependent upon having a soil which will retain the moisture; one which is not so light that it can be blown away yet light enough to be aerated, compact enough to permit of stability to the grass root and one having sufficient food to afford sturdy growth of turf. To this combination, add fresh water and the sunshine which is ever present and there will be no secret to growing a good turf in Florida.

You will understand that all putting greens must be reseeded each fall with either straight Italian rye grass or a mixture of Italian rye, red-top and blue grass or Italian rye and red-top only. This seed, if planted and mixed right in with the ever present Bermuda grass at the rate of about 175 pounds per green, will give you a good putting turf from December 1st until May 1st, after which only the Bermuda grass will survive but the Bermuda is thoroughly well matted by this time and gives a fairly good summer putting surface.



Grow Beautiful Greens

like famous Golf Clubs in California -

Write Today for booklet and prices.

LECCO

A complete grass food also produced by Lyman Carrior.

This spring plant Cocoos Creeping Bent, the same seed used by nationally famous California Clubs. Cocoos is the rare strain of Agrostis Maritima produced only by Lyman Carrier. It stands erect, keeps its vivid green color, resists disease and withstands adverse weather at seashore or on inland courses. Supply is limited. Order early,

LYMAN CARRIER

Granger, Ind. Willoughby, O. LYMAN CARRIER からかけったいんかん



ADJUSTABLE IN WEIGHT

Rolls the uneven surfaces too!

A S the seasons change, so should the amount of roller pressure. Light rolling in Spring and heavier rolling in the Summer assures the best fairways according to authorities.

Dunham Fairway Rollers conform to all turf conditions. Weight adjustable from 1300 to 5000 lbs. And the Dunham's three giant sections operate independently to conform with the contour of the ground. Used by leading clubs. Send coupon below for full particulars.

DUNHAM LAWN ROLLER CO. 113 Chambers St., New York, N. Y.

Canadian Office: Mount Royal Hotel, Montreal Please send complete details about the Dunham Fairway Roller.

Name .	 	 	
Address	 	 	

Espoma Brand Poultry Manure

A Natural Plant Food, entirely organic, grows turf in a natural way. An ideal top-dressing for greens and fairways. Contains no weed seeds. Specially composted and prepared—It Will Not Burn.

BRADLEY & BAKER, 420 Lexington Ave., NEW YORK, N.Y.

Sales Agents for Eastern States Poultry Manure Corp.

The paragraphs below are taken from the annual report of Guy M. Peters, green-chairman for the past five years of Olympia Fields C. C. (Chicago).

In Turning over this department, I cannot resist the temptation to pass on certain recommendations and advice. In doing so, I realize full well that each committee learns by its own mistakes and that the advice from one committee to another is usually of more benefit to the giver than to the recipient. However, the recommendations are:

- (1) Do not neglect or lower the standard of maintenance of our golf courses. Fight with the Finance Committee, fight with the Treasurer, fight with the Board of Governors, but secure an adequate appropriation for the proper maintenance of the courses. The members will support you.
- (2) Keep abreast of the developments in the art of greens and course maintenance. Keep in close touch with the Green Section of the U. S. Golf Association, and particularly the sub-section recently estab-

lished in the Chicago District. Remember that every year progress is being made in methods of treating turf diseases, development of more efficient fertilizers and the propagation of new strains of grasses. Avail yourselves of all the latest knowledge in golf course maintenance.

- (3) Watch your greens with never ceasing vigilance. They are the final test of a golf course. Watch the development, perhaps doing some experimenting of your own, of velvet bent. If you can find some reasonably economical manner of propagating velvet bent and can give the members a few velvet bent greens, they will rise up and call you blessed.
- (4) Continue to beautify the courses. Plant each fall at least a few trees and some shrubbery. Continue the policy of screening with shrubbery unsightly places around the courses and breaking up with trees and shrubs the open areas.
- (5) Adopt and stick to a program of fairway fertilizing. We cannot continue year after year taking everything out of the soil and putting nothing back in. Unless fertilized, in the course of time the fairways will seriously deteriorate. They

OUR 1930 GOLF COURSE EQUIPMENT CATALOGUE IS NOW READY
A POSTAL WILL BRING YOU A COPY

Grass Seed, Fertilizers, Equipment

Orders Shipped Same Day as Received

J. OLIVER JOHNSON, Inc.

World's Largest Golf Course Equipment House

@ Reg. J. O. J., Inc., 1928

Morgan, Huron, Superior Sts.

CHICAGO, ILL.

10 years of fur-

nishing seed di-

rect from the farms where it grows to you

BENT GRASS SEED

Nine-tenths of the seed offered by seed dealers invariably is of foreign origin and often is not acclimated to the severe variable climatic conditions of our northern states.

SHOULD AMERICANS PLAY THEIR GAMES ON "GERMAN, NEW ZEALAND OR CANADIAN" GRASS WHEN THEY CAN PURCHASE SEED THAT PRODUCES THE SAME KIND OF TURF FROM AMERICAN FARMERS WHO GROW IT?

A. N. PECKHAM Rhode Island

"Every penny of waste between farmer and consumer that we can eliminate will be a gain both to the farmer and consumer."-President Hoover.

have done so at other clubs. Once lost it takes years of time and much money to restore them.

- (6) Install a fairway wateriny system when the finances of the club permit.
- (7) Insist on an adequate budget. Then for your conscience's sake try to keep within your budget. To do so will serve no purpose except your own satisfaction. After the close of the fiscal year, the auditors and the treasurer will find some way by "inventory adjustments," or the inclusion in your account of extraneous items, of making you appear to have gone over your budget. Treasurers and auditors have always done so and probably always will do so. But you yourself will have the satisfaction of knowing you have at least kept close to your budget.

New Cogsdill Washer Features

THE new Roto ball washer, made by the Cogsdill Mfg. Co., Detroit, has its brush, formerly driven by chain, now driven by a V-type belt, similar to the fan belt on an automobile. The new belt is positive in action, requires no adjustment and will last indefinitely. All working parts are now made of either aluminum or bronze,

giving a washer that is rustproof, wearproof and waterproof, the makers say. A change has been made in the hinge arrangement of the top, which makes it easy to clean the washer. The brush itself is made of Russian pigs' bristles, that retain their stiffness and last.

PRO SHOP AS "SERVICE STATION"

D. LYON, president of the Fulname J. Co., makers of the ball marker that is found in so many pro shops, arises to remark that the growing recognition of the fact that pro shops are operated as service stations for players has been his theme song for years. He states that his com-pany's policy of playing up this aspect of the pros' performance has resulted in marked success.

In writing to GOLFDOM about how his proposition ties up with this feature of the pro business, Mr. Lyon states:

"We have contended, and have had very good evidence to support our contention, that the pro who sells Fulname marked balls to his players will suffer very little if any from the competition of the department store even at reduced prices.

"The service rendered by the pro in putting the player's name on the ball and



SPRING VALLEY COUNTRY CLUB, ELYRIA, O.

Where the Professional Golf Architect?was worth a \$1,000,000?

A so called architect knowing nothing of real estate routed an 18-hole course—for realty company—

A realty company, knowing nothing of golf, had but \$850,000 in lots-plus course as a consequence-Before it was too late our organization was called in an advisory capacity-

RESULTING-

in redesigning—and with some acreage—produced \$1,850,000 worth of realty and finer course.

HAROLD D. PADDOCK, Inc.

"Worth a Letter?"

715 Bulkley Bldg.

CLEVELAND

Service-Plus

Mowing, dragging, leveling, hauling—any golf course work that horses can do will be accomplished quicker and cheaper by the

Staude Golf Course Tractor



Low Priced

Priced at \$475 upward and sold on conveniently easy terms. Over 1000 golf alubs are now using them with the greatest success.

See our exhibit at the National Greenkeepers' Convention, Louisville.

E.G. STAUDE MAK-A-TRACTOR CO.

2696 University Ave. St. Paul, Minn.

To GROW thick and vigorous turf, use V-C FAIRWAY, the fertilizer for golf courses. Clean, inoffensive, unobjectionable—a rich food for grass, easy and inexpensive to apply.



VIRGINIA-CAROLINA CHEMICAL CORP.

Lawn and Garden Dept.

Richmond, Virginia

REFINED

Grass Seed

and

Complete Equipment

GOLF COURSES

SEND FOR COMPLETE CATALOG and GRASS SEED PRICE LIST

AMERICAN SEED CO.

"Quality Grass Seed for a Quarter Century"

Indestructible Flag Poles



PAY for themselves in reduced replacement expense, Can't rot, split or warp. Seamless tubular galvanized steel construction, beautifully lacquered. Always stand straight. Readily visible. Light in weight. Easy to handle.

Send for circular

and let us tell you how you can test these and other Standard Golf Course Equipment on your own course without obligation for *ten days free*. Write today.

Standard Manufacturing Company

Cedar Falls, Iowa



ALLERTON HOUSE

701 N. MICHIGAN AVE.

Official Chicago Residence 102 Colleges

25 Floors-1000 Rooms No Surrounding Buildings

R. C. A. Radio Speaker in every Room. World's greatest receiving installation.

An Outstanding Residence of Executives

Route Your Staff to the

ALLERTON

14 floors exclusively for Men. 7 floors exclusively for Women

> \$ 2.50 to \$ 4.00 Daily 12.50 to 25.50 Single 8.50 to 15.50 Double

Tractor Wheel Spuds

The R. H. wheel spuds save time installing and removing, they are made in many sizes for any type tractor or purpose. Low price and quality have been welcomed by Golf Clubs, in use on more than one-half the clubs in U.S. and Canada. Sample spud and circular on request; advise make of tractor and purpose used for.

(If your Ford or squipment dealer cannot supply, write direct.)

write direct.)

R. S. HORNER

GENEVA, O. GENEVA, O. Wheel Manufacturer of Wheel Spuds, Golf Tractor, Golf Wheels for Ford-son and Trucks.

Racks HANDICAL

John Willy Handicap Racks and Cards are standard with practically all the leading American golf clubs. Write for booklet.

JOHN WILLY, 443 South Dearborn Street, ILLINOIS

in acting as a clearing house through which the ball, if lost, may come back to its proper owner, gives the ball a value which more than offsets any small difference in price which may be offered by the store competitor.

'I note also, that several manufacturers this year propose furnishing a series of letters to the pros through which they may approach their customer list. This idea has been used by us for a number of years and we have furnished letters bearing the pros' name and address and they have been used quite effectively. We have spoken of the pro shop having a Fulname installation as a "Fulname Service Station" and we believe this term covers the situation about as effectively as anything that has occurred to us.

"While we confine ourselves entirely to these marking devices, we believe that we are putting into the hands of the pro one of the best tools for the purpose of good will building and that if he mi make use of it, he will find that he is getting a very large return for his trouble.

WILSON OPENS L. A. OFFICE

WILSON-WESTERN SPORTING GOODS CO. has opened a professional golf department at the Spreckels Building, Los Angeles. Jack Schaefer is in charge of the local branch. A complete line of golf clubs, bags and accessories will be carried.

MASHIE-NIBLICK IN B-R LINE

A MASHIE-NIBLICK has been added to the Beckley-Ralston line of "Stroke Saver" clubs. This club matches the rest of the B-R short game clubs in its square tapering grip. The club-head, which is of usual mashie-niblick size, has a very narrow sole.

Golf clubs wanting expert men as pros, greenkeepers and managers are invited to ask for GOLFDOM'S list of available men.

A Better GOLF SWEEPER

Sweeps clean—Reduces labor.
One man does the work of five.
Ask Your Dealer or
Write Us Direct. Springfield Lawn Sweeper Co. Springfield, Ohio
Also makers of tractor drawn sweepers

