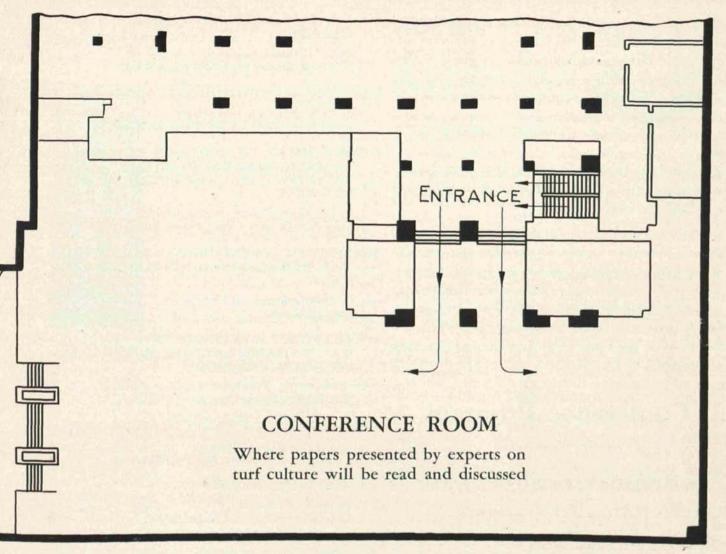


The National Greenkeeper



1933 Show Will Be Record Breaker

By JOHN MACGREGOR, President National Association of Greenkeepers of America



JOHN MACGREGOR

A Ew records both in attendance and in exhibit space should be set at our Chicago convention and Golf Show at the Hotel Sherman in February judging from the immediate and favorable response the principal golf equipment manufacturers have given to the exhibit contracts mailed this month.

This promptness on the part of the manufacturers would indicate that the coming year is being met with a feeling of optimism in all branches of the golf industry. After the havoc of the past three years, the coming season presents a rosier appearance and many of our officers and members expect our February show to witness the initial signs of a general upturn.

The reason for the rallying of exhibitors this year appears two-fold. First, it is universally recognized that throughout the depression era since 1929 orders for new equipment have been at a minimum, and many clubs curtailed all equipment expenditures. This year will bring a change. Stocks have run so low that even the smallest clubs will be forced to replenish their supplies. And at present price levels, the time for this is opportune.

A second, and even stronger factor influencing

the manufacturers' exhibits at the Chicago Show is the realization that in the interests of economy of operation, antiquated equipment will have to be replaced. Sprinkling systems, mowers, and the scores of other forms of equipment necessary in the maintenance of a modern golf course are wasting thousands of dollars through their inefficiency. Boards of directors will be shown at the outset of the new year that going through another season with worn-out equipment will mean an unnecessary drain on the club treasury.

Thus we are looking forward to a really great show in February. And with the thorough groundwork our convention officers are laying for the association members and exhibitors here in Chicago, presence at this convention and show will prove highly profitable. The World's Fair city is expecting all of us for a pre-view of its famous Century of Progress.

Conference Program

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### WEDNESDAY, FEBRUARY 1, 1933

### EFFECT OF CUTTING ON ROOT GROWTH

By Dr. C. M. HARRISON University of Chicago, Chicago, Ill.

### REHABILITATING OLD GOLF COURSES

By GRANGE ALVES, Pro-Greenkeeper Acacia Country Club, Cleveland

### HUNTING FOR THE PERFECT GRASS

By PROFESSOR H. B. MUSSER University of Pennsylvania, Philadelphia

### BETTERING MAINTENANCE AT SMALL TOWN GOLF COURSES

By PROFESSOR V. STOUTEMYER University of Iowa, Ames, Ia.

### MUNICIPAL COURSE MAINTENANCE

By HAROLD E. STODOLA, Greenkeeper Keller Golf Course, Saint Paul, Minn.

### MAINTENANCE PRACTICES OF 1932

By O. J. NOER Milwaukee Sewerage Commission, Milwaukee, Wisconsin

### THURSDAY, FEBRUARY 2, 1933

### GREENKEEPERS' VITAL IMPORTANCE TO GOLF

By GANSON DEPEW, United States Golf Ass'n., Green Section, Washington, D. C.

### BUDGETING FROM THE GREENKEEPERS' VIEWPOINT By R. E. FARMER, *Greenkeeper* Brynwood Country Club, Milwaukee, Wisconsin

BUDGETING FROM CLUB MEMBERS' VIEWPOINT

By C. W. JOHNSON, *Greenkeeper* Sunset Ridge Country Club, Winnetka, Illinois

POSSIBLE EFFECT OF EXTENSION OF FAIRWAY WATERING RELATING TO PRESENT MAINTE-NANCE PRACTICES FROM THE GREENKEEPERS' VIEWPOINT

By EDWARD B. DEARIE, JR., Greenkeeper Ridgemoor Country Club, Chicago, Illinois

POSSIBLE EFFECT OF EXTENSION OF PRESENT FAIR-WAY WATERING FROM THE PLAYERS' VIEW-POINT

By PAUL E. GREEN Chicago, Illinois

- POSSIBLE EFFECT OF EXTENSION OF PRESENT FAIR-WAY WATERING FROM THE MOWER MANU-FACTURERS' VIEWPOINT
  - By EDWARD H. WORTHINGTON, Vice President Worthington Mower Company, Stroudsburg, Pa.

### GREENKEEPERS' PROGRAM OF SELF EDUCATION

By PROFESSOR J. G. MOORE University of Wisconsin, Madison, Wisconsin

### (SUBJECT TO BE ASSIGNED)

By Dr. E. J. KRAUS University of Chicago, Chicago, Illinois

### FRIDAY, FEBRUARY 3, 1933

RECENT TECHNICAL DEVELOPMENTS IN TURF MAINTENANCE

By DR. JOHN MONTEITH, JR. United States Golf Association Green Section, Washington, D. C.

### THE GREENKEEPERS WORK IN BROAD PERSPECTIVE

By D. W. DANLEY, Manager Glen Oak Country Club, Glen Ellyn, Illinois

### SOILS, THEIR COMPOSITION AND FERTILITY

By PROFESSOR C. E. MILLER Michigan State College, Lansing, Michigan

### MACHINERY MAINTENANCE

By RALPH JOHNSON, Greenkeeper Medinah Country Club, Chicago, Illinois

### INSECTS, THEIR HABITS AND CONTROL

By DR. W. P. HAYES University of Illinois, Urbana, Illinois

### DEPARTMENTAL COOPERATION

By ALEX PIRIE, Pro-greenkeeper Old Elm Country Club, Lake Forest, Illinois BUDD

.

## Minnesota Gossip

By H. E. STODOLA, Secretary



H. E. STODOLA Secretary, Minnesota Association of Golf Course Superintendents. **T**<sub>HE</sub> November meeting of the Minnesota greenkeepers was held at Minikahda club. Twenty members were present and "Charley" Erickson made them all feel at home.

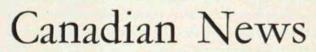
Our chairman, Leo Feser told about the N. A. G. A. Directors meeting at Cleveland and asked that we give John MacGregor the support we gave to Colonel John Morley. The discussion concerned the coming Golf Show. It was decided to pass up our Short Course this year and make every effort to have a one hundred per cent representation at Chicago.

One of our men suggested that when we visit a course during a meeting we should have a demonstration of certain work. It would

be interesting to see how a fellow-greenkeeper dresses his greens, how he sharpens his mowers or how he prevents brown patch.

This is the time of year when fairway fertilization is in order. I suppose there are many clubs that had to omit it this year. It is essential to fertilize each year and when you miss it, it takes a long time to catch up. A healthy, well-nourished grass can withstand drought and disease better. Try and fertilize this fall if you can.

The next meeting will be held Monday, December 12, in the Log Room of the Superior Golf Club.



By J. H. EVANS, Golf Editor Toronto Globe

An extensive program was mapped out by the Ontario Greenkeepers' association for the series of monthly meetings which the association will hold in Toronto until its members are expected to resume their duties next spring. There was an excellent turnout of members for the first indoor meeting.

Each member is to contribute a paper of his own to be read at the meetings, giving his experience during the past year on operations at the reduced cost forced on him by prevailing conditions.

He is expected also to include any experience with fertilizers and with any method used for fungus, as well as the control of diseased grass. The general routine of course maintenance was also included in the topics to be discussed during the winter.

### NOTICE THE 4 ARROWS?

Every one points to a new cutting edge—four on every blade—no wonder more and more users are changing to Budd all the time. Get the facts. Just ask for particulars— TODAY! BUDD MFG. CO. Rayenna, Ohio

BED



Vice-president Sansom spent some time in an elaboration of the work of the National Greenkeepers' association. Mr. Sansom dealt with the annual convention of the association to be held in the Hotel Sherman, Chicago, early in the new year and urged all greenkeepers of the Province to attend if they could find a way to do so.

He said he felt they could learn a great deal at the convention and also declared it was their duty to support the association by attending the annual gathering.

# Pacific Coast Gossip

**L** F INSPIRATIONAL surroundings mean anything on a golf course, then the players on the Lincoln Park Municipal Golf Course of San Francisco ought to be forever at the peak of their game. The course is located on the high bluffs overlooking the Golden Gate through which since the days of '49 a constant stream of ships from every nation has sailed. In the center of the course is situated the beautiful Palace of the Legion of Honor erected in commemoration of the heroes of the late war. And just outside the front portals of this edifice is a circular driveway marking the western terminus of the Lincoln Highway.

DR. LEWIS L. THOMAS, chief factotum of the Gilman Hot Springs Golf Course at San Jacinto, California, claims the best nine-hole resort layout in the state, which is saying something. However his claim is backed up by such well-known professionals as Olin Dutra and Larry Gleason.

### 16 16 IF

### WEATHER PROPHETS ARE BUSY

T HE weather prophets on the Pacific Coast armed with scientific instruments, willow forks, rheumy bones, rabbits' feet, and what not are now indulging in the annual pastime of prognosticating the rainfall. As usual few of them coincide. The scientists, testing the temperature of ocean water, predict a dry winter. The Indians, judging by the coats of animals, say that there will be much rain. Greenkeepers can take their pick and act accordingly, but in the meantime keeping their fingers crossed.



club official needs a copy of "The Putting Green." It has 40 illustrated pages on grasses, construction, care and planting of greens.

O. M. SCOTT & SONS CO. MARYSVILLE, OHIO

### U. OF C. ON WEED CONTROL

THE University of California is performing commendable work in the field of weed control. The institution has put some of its scientists to work on this problem which is so vital to the interests of all growers in the state. Much experiment has been carried on to determine just what are efficient herbicides.

One of the most significant findings is to the effect that chemicals are a very poor substitute for keeping ground clean and free of weeds by mechnical means. The greenkeeper has still a long while to wait who looks forward to the day when weeds can be eliminated from his greens by dosing them with herbicides.

### Cincinnati Greenkeepers' Meet By HAROLD GREEN

HE Cincinnati Golf Greenkeepers' Association held its monthly meeting at the Cincinnati Country Club, Friday night, Nov. 4. George Benvie, president and Gordon Meyers, secretary-treasurer, were re-elected to serve during the ensuing year. The members wish to thank Wayne Miller and Jim Morrison for their hospitality. The next meeting will be held at Hotel Alms, December 3.

Those attending were, J. Bonner, Taylor Boyd, Al Langfield, E. Herbstreit, Carl Langfield, Gordon Meyers, Georgie Benvie, Bill Fruechtenmeyer, Jim Muirden, Bob Strong, Jim Thompson, Tom Miller, G. Glanau, G. Waring, J. Allen, C. Schneider, E. Brophy and A. Brandhorst.

### Worthington Covers Midwest

J. B. HURLOCK, Western Manager of the Worthington Mower Company with headquarters at 517-21 So. Loflin Street, Chicago, announces the appointment of L. A. Ferguson, formerly sales manager of the Ideal Power Lawn Mower Company, as travelling representative for Wisconsin, Indiana and Michigan.

Leo. F. Murray, who was with J. Oliver Johnson, Inc. for five years and last year with the Golf Course Equipment Company in Chicago, has also joined the company and will cover Iowa and Missouri.

## Midwest Notes

By A. L. BRANDON, Greenkeeper Saint Charles Country Club, Saint Charles, Ill.

O MIDWEST Greenkeeper's Association notes have appeared in the NATIONAL GREENKEEPER for sometime. We hope no one has assumed that our association has taken the rap or leaped from some fifty story building, which seems more or less the prevalent malady.

But nevertheless the Midwest has survived two bank failures, has increased its membership, has held regular and well attended meetings and is all hot and raring for the coming N. A. G. A. Convention in Chicago. 25 25

I NDOOR meetings will begin during the first part of December and will be held at the Hotel Sherman in Chicago and not at the Great Northern Hotel as of the past years.

### 25 NOER DROPS A GEM

25

AT THE final outdoor meeting held at Medinah Country Club (President R. N. Johnson's club), O. J. Noer, the Milwaukee sage, dropped the following gem during his after dinner talf, "If greenkeeping is to continue to survive as a worthy profession, the greenkeeper must above all know his job and fulfil it."

AT SCHOOL we used to have a Prof, who would continually make this statement prior to all exams, "so take heed and govern yourself accordingly," and brother there were very few second trials given to members of his classes. Somehow, coupling this thought with Mr. Noer's seems to apply itself strongly to the greenkeeper's position with his club today. Possibly the writer is all wet, but we think it calls for a little individual thought anyway.

C. M. Harrison of the U. S. G. A. was also a speaker at this meeting. I understand that Doctor Harrison is on the Speaker's program at the Convention, and those in attendance at the Convention certainly should make it a major object to hear him.

Before passing over the final outdoor meeting of this season, a word of praise for the meal, and a few glasses of foamy amber colored tea.

### FRED KRUGER COMES BACK

GERTAINLY was glad to see Fred Kruger at the meeting for it has been some time since Fred attended his last meeting. Fred has been "more or less" between the devil and the deep blue sea all summer-first, a bank failure, then another damn bank failure, then to top it off his house on the club grounds burned to the ground (Sept. 11). Fortunately insurance covered most of the loss

and at this writing (Nov. 13) his new home is almost completely built.

MIDWEST members are happy to have in its membership roster, Mr. John MacGregor, president of the National Association of Greenkeepers of America. "Mac," every Midwest member wishes you a successful and enjoyable term of office. And to you, Colonel Morley, president-emeritus, we wish return of good health and the assurance that your labors have not been in vain.

## Development of Golf

A questionnaire from the new president of the N. A. G. A., who is one of America's foremost turf culture experts By JOHN MACGREGOR, Greenkeeper Chicago Golf Club

**1** HAVE been thinking about interesting the members in the magazine. I believe the best method would be to induce them to write. With this in mind I have chosen two subjects which should prove interesting as well as profitable in the development of turf on golf courses.

(1) Do or do you not favor fairway watering? If you do, what system in your opinion would you consider the most practical, hose or hoseless? What size of mains and outlets, what type of pumps and capacity?

(2) What type of grass has proved most successful on putting greens in your district? Do you think putting green grass should be standardized in the different latitudes?

The readers of the NATIONAL GREENKEEPER will be interested in your accounts of these two important subjects. Differences of opinion are welcomed, as this opens a channel for discussion in future issues.

You expect your magazine to be interesting; it will be so if you do your part by starting immediately to give your views on the subjects presented, so they can be printed in the next issue of the GREENKEEPER.



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### Obituary

 $\mathcal{M}_{R.}$  L. T. REAM, a member of the Wisconsin Greenkeepers' Association, and a charter member of the National Association of Greenkeepers of America, died a short time ago at his home in Green Bay, Wisconsin. Mr. Ream from the beginning of his membership in 1927 was very active in promoting the work of the Association.

To the members of his family and to the friends of Mr. Ream, the Association wishes to express its sincere sympathy.



## Market Place and Buyers' Guide

Where reputable manufacturers and dealers list and describe their products. Greenkeepers are requested to write the Market Place for any special information they desire about supplies or equipment.

Airport Drainage Armco Culvert Mfrs. Association Wendell P. Miller and Associates

Ant Control Royal Products Company

### **Ball Washers**

J. Oliver Johnson, Inc. Worthington Mower Company Ideal Power Lawn Mower Co. G. B. Lewis Company

Ball Locators Worthington Mower Company

Bent-Coos County State Sealed and Certified J. M. McCullough's Sons Company Seaside Bent Company

Bent Seed—Cocoos Creeping Stumpp & Walter Company

Bent Seed-Prince Edward Island J. M. McCullough's Sons Co.

#### Bent Stolons

Hubbard Nurseries O. M. Scott & Sons Co. Stumpp & Walter Co. Ohio Humus Products Co. Illinois Grass Co. Hiram F. Godwin Lyman Carrier

Bluegrass-Seed J. G. Peppard Seed Company

### **Brown Patch Control**

Stumpp & Walter Co. J. Oliver Johnson, Inc. Arthur D. Peterson American Cyanamid Sales Co. C. B. Dolge Company McClain Bros. Co.

Charcoal Cleveland Charcoal Supply Company

#### Cocoos

Lyman Carrier Stumpp & Walter Company

Compost Distributor Toro Mfg. Company The Root Mfg. Co.

### **Compost Mixer**

Toro Mfg. Company Royer Foundry & Machine Co, Beardsley & Piper Company Silver Mfg. Company Kemp Mfg. Company

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Cultivators (Disc) John H. Graham & Co., Inc.

Cultivators (Spike) John H. Graham & Co., Inc.

Drainage Engineers Wendell P. Miller and Associates

#### Dump Carts Toro Mfg. Company J. Oliver Johnson, Inc. Worthington Mower Company Peter Henderson & Co. Ideal Power Lawn Mower Co.

Fairway Fertilizers Synthetic Nitrogen Products Corp. Armour Fertilizer Works

#### Fairway Irrigation Buckner Mfg. Co. Campbell Irrigation Company Economy Irrigation Company L. R. Nelson Mfg. Company Double Rotary Sprinkler Co.

Fairway Mower Blades The Budd Mfg. Company

Fairway Mowers Pennsylvania Lawn Mower Works Toro Mfg. Company E. G. Staude Mak-A-Tractor Co. Ideal Power Lawn Mower Company Worthington Mower Company The F. & N. Lawn Mower Co. National Mower Company

### Fairway Tractors

International Harvester Co. of America

#### Fertilizers

Milwaukee Sewerage Commission J. Oliver Johnson, Inc. Peter Henderson & Co. Nitrate Agencies Co. Atkins & Durbrow, Inc. Arthur D. Peterson American Cyanamid and Chemical Corp. Lyman Carrier Company Bayer-Semesan Company Synthetic Nitrogen Products Wayside Gardens Company Armour Fertilizer Works Cobwell Reduction Co. Garden Supply Company

#### **Fertilizer Distributors**

International Harvester Co. of America Synthetic Nitrogen Products Corp. The Root Mfg. Co.

Flag Poles Ideal Power Lawn Mower Company Standard Mfg. Company

Flexible Steel Mats J. Oliver Johnson, Inc.

Fungicides Bayer-Semesan Company, Inc. Sherwin-Williams Company

#### Fairway Rollers

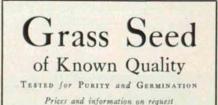
Toro Mfg. Company Philadelphia Toro Company Worthington Mower Company

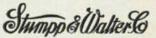
Golf Architecture Charles Evans, Jr., and Associates

Golf Course Construction Ohio Humus Products Co.

#### **Golf** Equipment

Stumpp & Walter Co. Peter Henderson & Co. Arthur D. Peterson Ideal Power Lawn Mower Company Lawn Equipment Corp. T. W. Wood and Sons Worthington Mower Company





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Hole Cups Standard Mfg. Company

**Hole Cutters** Ideal Power Lawn Mower Company Lawn Equipment Corp. Standard Mfg. Company

Hole Liners Chilton Crocker Company

Hole Rims Ideal Power Lawn Mower Co. Arthur D. Peterson

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Hose

Peter Henderson & Co. Arthur D. Peterson

Humus

Hyper-Humus Company Ohio Humus Products Co. Peter Henderson & Co. Atkins & Durbrow, Inc. Garden Supply Company

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Iron Pipe McWane Cast Iron Pipe Co.

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Lime Spreaders International Harvester Co. of America

Mower Blades The Budd Mfg. Co.

Mowing Equipment E. G. Staude Mak-A-Tractor Co. Toro Mfg. Company Pennsylvania Lawn Mower Works Ideal Power Lawn Mower Co. Worthington Mower Company Arthur D. Peterson International Harvester Co. of America The National Greenkeeper



MR. GRANGER'S report is typical of the many received from users of this "new-standard-of-performance" Toro mowing equipment. The past season has proved beyond question the amazing efficiency, speed and economy of the new Toro Master Mowing Outfits.

If you are faced with demands for lower maintenance costs, if you are not satisfied with results you are getting from your present equipment, then it will pay you to investigate the Toro line now, and get the facts and figures ready for the next meeting of your Board or Committee.

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**Mower Sharpeners** Fate-Root-Heath Company Toro Manufacturing Company Henry H. Doty Palmer-Bee Company

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**Putting Cup Illuminators** Chilton Crocker Company

### Market Place and Buyers' Guide---

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Tee Stands Worthington Mower Co.

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Tractor Wheels and Spuds R. S. Horner

Trees Blue Ridge Evergreen Supply Co.

Turf Fertilizers Armour Fertilizer Works

Urea Synthetic Nitrogen Products Corp.

Water Pipe McWane Cast Iron Pipe Co.

### Worm Eradicators

Peter Henderson & Co. C. B. Dolge Company Reade Mfg. Company

### Soils

### (Concluded from Page 5)

particles with abundant pore space to provide the best aeration and assure that excess of water will be removed rapidly, give or assist capillary action, and yet hold the moisture that is always necessary for the grass plants to thrive.

### December, 1932

To modify a heavy clay soil will require a great deal of sand. Yet a sandy soil will not require nearly as much clay in proportion to make it a sandy loam. A sandy soil, before it can be called sandy, has to contain 80% or more of separate sand. The balance could be all clay. A clay soil on the other hand can contain 30% or more of the separate clay, the balance can be all sand; thus only by adding 10% of clay, a soil may be changed from one extreme to the other.

### Soil Nutrients

(Concluded from page 9)

### MAKING SOILS PURPOSELY ACID

 $T_{\rm HE}$  best practical method for making soils purposely acid is to add sulphur. Crude sulphur flour is the material to use, at the rate of 7 to 15 pounds per thousand square feet. It has no burning effect on grass, and rather quickly changes to sulphuric acid in soil. All of the sulphur is changed to acid during one growing season.

A more rapid but expensive method is to add alum (aluminum sulphate) up to 6 pounds per thousand square feet. Alum is already acid and is at once effective. In buying this material, be sure to specify aluminum sulphate. The alum of trade contains potash, which ought to be left out of the picture. One might even use ammonium alum for the nitrogen contained. This would acidify soil just as much as ordinary alum.

Much the same condition applies in acidifying soil as in liming, namely that the acid-forming substance affects only that part of the soil with which it comes in contact. Such a condition no doubt accounts for the failure of continued sulphate of ammonia treatments to eliminate clover from greens. The acid has little or no effect on soil a few inches down where the clover roots thrive.

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GENEVA



### Super Roller Greens Mower now has eight blades

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has demonstrated its long-run economy of operation and maintenance. PENNSYLVANIA Fairway Mowers come in gangs of 3, 5, 7 or 9 and all units are of malleable iron and steel construction and positively unbreakable. Choice of 36-inch or 30-inch cut. Tractor is equipped with worm drive.

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Buckner Systems are the leaders for low cost, highly efficient course maintenance. More Buckner Sprin lers and valves are in use on American courses than any other make. Without obligating yourself you may have the Buckner Catalog before you on your desk while you plan. Write for it.,

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