

which he is entitled. They keep in touch with the professional through lessons or the buying of supplies, but they seldom see or have any contact with the greenkeeper. It is very much like a general in command of a battle; the soldiers do the fighting and are visible to onlookers, but the commanding officer is behind the lines often unseen but it is his thought, experience, initiative, and planning which directs the battle and wins victories.

We see men working on a golf course; we play over fine turf; we have a pleasant afternoon, but how often do our thoughts turn to the greenkeeper whose ability, experience and direction has made all this possible. If he is interested in his work, which with many is his very life and soul, he is often on the links very early in the morning and late at night. Few realize his anxiety when owing to some climatic condition or something else, brown patch or some disease strikes the grass, and how he strives to effect a cure so that the players may enjoy their game. He is to golf what the mainspring is to a watch.

I am convinced that the part the greenkeeper plays in bringing elderly men out of their poorly ventilated offices, clubs, and homes, into the open and with the exercise they obtain, has done more for the preservation of health than tens of thousands of doctors could ever do. He has been the means of prolonging and saving many lives, and if he has done nothing else it is something well worthwhile.

GREENKEEPING IS A PROFESSION

GREENKEEPING today is more or less a profession, requiring technical and scientific knowledge, and it is to the credit of greenkeepers that they are anxious to obtain it. One of the ways is membership in an outstanding greenkeepers' association, which among other things is doing such splendid work in arranging the instructive addresses you hear at your conventions and the articles of value which appear in your official publication, the NATIONAL GREENKEEPER AND TURF CULTURE, so ably edited by Robert E. Power.

Your success is due to the many years of service and loyalty of your officers, among whom the most credit must be given to the founder of your organization, whose devotion to its interests should never be forgotten, Colonel John Morley. In his resignation as President, he carries with him the affection and gratitude of us all, but we rejoice that in his

successor, John MacGregor, you have a man who is splendidly equipped to go on with the work.

In referring to the educational side of greenkeeping, I feel in fairness I should speak of the benefits greenkeepers have received in the instructive articles appearing in *Golfdom*, sponsored by its able editor, Herb Graffis. With Mr. Robert E. Power, these men have in their publications earned the gratitude of all greenkeepers in the dissemination of information regarding better turf conditions which have been invaluable.

GREEN SECTION HAS HELPED

ANOTHER way in which greenkeepers have been helped is in the results obtained by the Green Section, U. S. G. A., in its experimental and research work, and I wish to take this opportunity to express to the greenkeepers our hearty appreciation of the cordial support they have given our efforts for many years past. The U. S. G. A. maintains no golf links of its own, so that the work of the section is entirely devoted to the interests of clubs and primarily to help the greenkeeper.

Years ago, I fear, there was a feeling by some greenkeepers that we were usurping their privileges and treading on forbidden ground. We were and are only desirous of being helpful to those who know very little about the conditioning and proper maintenance of new golf courses continually springing up, and giving to greenkeepers of experience valuable information obtained from experimental and research work. There has been absolutely no thought or intention of forcing this on greenkeepers or clubs, and they have been entirely free to use or discard it as they think best.

We request and encourage greenkeepers to undertake their own experiments in order that the general interests of turf culture may be promoted. I think it is now realized that at our large experimental plots at Arlington and Chicago and at our sixteen demonstration gardens throughout the country, we have been in a position with funds to conduct experiments and research work which is impossible by greenkeepers at clubs having only limited means. This is shown by the increasing attendance at our annual meetings at Arlington, Chicago, and the demonstration gardens where it is possible to observe and discuss in detail the way different grasses, fertilizers and other treatments have acted and in the innumerable letters daily received

from greenkeepers and Green chairmen requesting advice.

We do not claim infallibility for sometimes extended experience with fertilizers and grasses show some problems are as yet unsolved. Much depends upon certain soils in widely different localities and climatic conditions, which often makes a dogmatic or widespread procedure impossible to obtain the best results. All that you and we can do is to keep on experimenting and I think we are all agreed that great progress has been made in the past 15 years. Just compare the condition of putting greens and fairways of today with those of the past to realize the truth of this statement.

There is still much to be learned, and in this the greenkeepers can in their own experimentation and experience be of the greatest help. We still have the problems of leaf spot disease, turf insect control, and fairway improvement, and as we learn from continued experiments and research, the great waste of money now going on will be materially lessened in the knowledge of the best methods to follow.

INSECTS ARE GREATEST SOURCE OF TROUBLE

INSECTS still continue to be the greatest source of trouble on many golf courses such as the mole cricket in the south, ants, grubs, earth, army, and grass webworms, and many other and until adequate information is obtained, a large sum of money is spent each year on golf courses without results.

At Arlington some opportunity was afforded for study of cut worm and sod webworm control, and it is now felt that these pests may be satisfactorily controlled on fine turf by any of several poisons. Earthworms were particularly troublesome, as elsewhere in the country, and remained so in spite of repeated trials of remedies hitherto effective. More work is needed on this problem.

Most of the experimental work thus far has been in the growth and treatment of putting greens, but the condition of fairways is just as important, and few clubs have perfect ones. This brings to the front problems which in most cases have been unsolved, such as the best methods of preparing fertilizing and seeding various soils in different degrees of climate, time of application of the fertilizers, and their rotation; best use of water, particularly in view of the sprinkling systems which many clubs

have installed, best height to cut, control of weeds, particularly clover which too great use of water promotes, the renovation of poor, weedy turf, the perpetuation of good Bermuda grass, and the treatment of brown patch, concerning which we have learned much in the past two years.

A systematic study and experimentation is necessary to enable us to solve and successfully meet these problems. In all of them the greenkeeper can be of the greatest assistance and in our combined efforts, success will be finally attained.

U. S. G. A. MUST ECONOMIZE

THE U. S. G. A. regrets the necessity of the strictest economy which will materially curtail the activities of the Green Section, but I am glad to tell you that it has decided to continue the mid-west turf garden near Chicago in the interest of the many clubs in this district and adjacent states.

As I said in my address two years ago at your Columbus convention, only in a hearty and cordial cooperation among us all can the best results be obtained. We are all interested in producing perfect fairways and putting greens.

An honest difference of opinion will, of course, prevail at times, as to the best methods to follow, but in working together we can make golf which we all love, the most enjoyable of games with better conditions of turf at a minimum expense, as our ultimate goal.

GREENKEEPER IS VITAL FACTOR IN GOLF

IN CONCLUSION, I desire to strongly emphasize again that the greenkeeper is the most vital factor in golf. To his work is due its ever-increasing popularity, the construction of thousands of the links of the private clubs, the erection of the splendid club houses on them, the spread of municipal and daily fee courses, and the growth of one of our nation's largest industries in the supplies and accessories of the game. Upon his efforts depend the success of any club or golf course in attractive and well-kept putting greens and fairways, and to him the golfer is indebted for the pleasure of playing on well-conditioned turf. He is richly entitled to the thanks and appreciation of the millions who play the game, and when the history of golf is written the greenkeeper should and will receive the recognition which he has so deservedly earned.

Ask Us What To Do

A page for the discussion of intimate problems on turf culture and plant growth. We are an international authority on these subjects. Send in your questions—your name will not be used.

Fescues and blue grass are said not to be indigenous to the soils of Western Pennsylvania and Eastern Ohio. Should no attempt be made to seed grasses of this type in these sections?

The soils of Western Pennsylvania and Eastern Ohio are not the natural homes for grasses growing best under neutral or slightly alkaline conditions. Shale clays are largely responsible for these acid conditions and are best corrected by heavy phosphorus feedings. Bone meal as a source of phosphorus, would act too slowly. They will thrive if properly cared for in this manner. (Penn.)

* * *

I have seen rhododendrons growing wild in the mountains of the South and always among limestone boulders. This seems to indicate lime is needed for their healthy growth rather than acid conditions. Am I right?

Rhododendrons on mountain sides grow in pockets in which debris, washed from the slopes, has collected. The debris would be largely leaves, twigs and decaying wood, and the greater part of the year this pocket would be filled with water. This makes a characteristic undrained peat deposit in the process of putrification and is necessarily acid. Hardwood peat in the earliest stages of decay, producing an abundance of potash, is the ideal medium in which to grow rhododendrons. (Ohio)

* * *

We have put great dependence in ammonium sulphate when needing quick recovery on our greens. If its use is continued for too long a time, it loses its effect. Why?

You have but a limited amount of lime in your soil and this will eventually be taken up by the sulphuric acid, freed from such a feeding. When this occurs, there will possibly be no alkaline base with which the nitric acid formed by the soil bacteria can combine to make the soluble nitrate feeding required by the turf. If lime water is then applied in liberal quantities, recovery should be imme-

diate. This should be applied while the water still holds a small amount of lime in suspension. (Ohio)

* * *

I have moved my sweet pea bed each year but have found no place where they will do well. Some of my friends have no such trouble.

Stop moving them. Before planting next season, spread a small amount of complete fertilizer in the trench, thoroughly mixing with the soil. Borrow a quart can of soil from your friend's sweet pea bed, spreading it through the trench before planting. Your friend's soil is well supplied with the particular nodule producing bacteria the sweet peas require. Inoculation in this manner, is probably what you have needed. (Ohio)

* * *

Our fairways were made on virgin blue grass sod in a very productive farming section but they have not produced good blue grass turf. Should they be topdressed?

Your fairways have probably been blue grass pasture land and pastured close for many years. It is very likely a case of taking off much and putting back but little to replace lost feedings. Most lands of this description, rarely show more than ten pounds of phosphorus to the acre. (Truog.) An application of complete fertilizer, heavy in phosphorus, should be made, followed by a topdressing of well-rotted manure. (West Virginia)

* * *

What is now considered the best and most economical method of producing topdressing?

The great majority of golf clubs still stir their compost heaps by hand. Many clubs are doing without topdressings because of the expense incurred in preparing in this manner.

Undoubtedly the most economical and best method is to take one-half acre of ground in an out-of-the-way location on the course which should be plowed deeply, disced and harrowed until fine. Upon this area should be spread 45 tons of good

humus or its equivalent in well-rotted stable manure. This should be disced in deep and whenever the tractor has a spare hour, it can spend it profitably in stirring this ground. When well mixed, it should then be again stirred with a plow to the original depth of plowing with subsequent stirrings when the tractor is available.

One man and a tractor, working at odd times, can prepare 500 cubic yards of perfectly mixed top-dressing, free from weed seed, at a total cost of not to exceed \$1.00 per cubic yard. During dry weather and preferably in July when the nitrate content of the soil is at its peak, it may be stored in a dry place for future use. (Indiana)

Golf Course News

CLEVELAND DISTRICT ESTABLISHES BUYING BUREAU

By FRANK W. ERMER, *President*

The Cleveland District Association of Greenkeepers

JUST a few lines to let you know that the Cleveland District Association of Greenkeepers are still on the map. There are times when we have to lay aside our pencils, but at the same time we have always at heart to try and do something for the benefit of golf.

The past winter months when the greenkeeper has just a little more time to ease his mind from his summer worries, we promoted an educational program whereby we had several well-known speakers on various subjects on golf course maintenance for the benefit of its members, which also benefited the clubs whom they represented.

In the past months the directors of the Association have been working on a plan to save the clubs who have a greenkeeper representing the Cleveland District Association of Greenkeepers money on their maintenance cost.

In order to do this we had to establish a Buying Bureau, whereby the clubs representing the Cleveland District Association of Greenkeepers can buy the best materials at the cheapest prices. This Buying Bureau is solely supported and directed by the Greenkeepers' Association and there will be absolutely no charge to any club who has a greenkeeper belonging to our Association.

The discounts allotted to the Association through the Buying Bureau go directly to the club that has purchased through it. Not one penny goes to the Association and as I have said before it is solely supported by the Association.

Now in closing I will say any greenkeeper representing the Cleveland District Association of Greenkeepers should give our Buying Bureau a trial and compare prices received otherwise.

New England Notes

By GUY C. WEST

THE July meeting of the Greenkeepers' Club of New England was held at the Tatnuck Country club, Worcester, Mass., on July 10. There was a demonstration of Locke power mowers, including the power putting green mower, also a golf tournament.

The August meeting was held at the Belmont Spring Country club, Waverly, Mass., on August 7. At this meeting a feature was the demonstration of the loam baker which the greenkeeper, Charles Parker, uses to "cook" his compost to kill weed seed. This baker consists of a pipe with a screw conveyor, enclosed with brick, and with two Hauck burners supplying the heat. Two men can operate this baker efficiently, and it works well to kill the weed seed. A discussion on "ants" also took place at this meeting, and a golf tournament in the afternoon.

The Rhode Island Greenkeepers' Association held its July meeting at the Gloucester Country Club, Harmony, R. I., on July 17, and its August meeting on August 17 at the Barrington Country club, Barrington, R. I. The regular annual clambake was the special feature at this latter meeting.

July was very dry in most sections of New England, but August brought much rain, and as a result most of the fairways, brown in July, are now green again. Work is progressing at the Charles River Country Club with its hoseless system for fairway watering, the first nine having been already completed.

Trade News About Turf Culture

AMES, IOWA

Athletes and other sport enthusiasts returning to Iowa State College this fall will see under construction facilities that will both improve and beautify the Cyclone athletic fields.

Improvements on the stadium and gridiron of State Field are being rushed to completion for the opening football game with Central College, September 23. Work has been begun on a five-year program which will completely refinish the west stadium. Extensive sodding and watering has repaired the damage inflicted upon the gridiron when scrapers were used to remove the snow for the Oklahoma game last year.

* * *

LOUDONVILLE, OHIO

A proposed 1,000-acre addition to the scenic Clearfork state park at Loudonville in Ashland county was discussed at a recent meeting.

Edmund Secrist, state forester, met with representatives of the Ashland County Wild Life Conservation league in Loudonville.

The Loudonville park at present consists of about 1,500 acres extending along the Clearfork creek. The proposed addition would take in forest lands west of the present park acreage, it was learned.

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.

Names and Addresses of Leading Manufacturers and Dealers

- | | | |
|--|--|---|
| Royal Products Company , 214-216 S. Charles St., Baltimore, Maryland. | Cleveland Charcoal Supply Co. , 3905 Jennings Road, Cleveland, Ohio. | Nitrate Agencies Company , 104 Pearl Street, New York City, New York. |
| J. Oliver Johnson, Inc. , Morgan-Huron Superior Streets, Chicago, Illinois. | Wood Charcoal Research Bureau , P. O. Box 356, Jacksonville, Florida. | Atkins & Durbrow, Inc. , 165 John Street, New York City, New York. |
| Worthington Mower Company , Stroudsburg, Pennsylvania. | Royer Foundry & Machine Company , 158 Pringle Street, Kingston Station, Wilkes-Barre, Pennsylvania. | Bayer-Semesan Company , Wilmington, Delaware. |
| Ideal Power Lawn Mower Company , Lansing, Michigan. | Kemp Mfg. Company , Erie, Pennsylvania. | Standard Mfg. Company , Cedar Falls, Iowa. |
| Toro Manufacturing Company , Minneapolis, Minnesota. | John H. Graham & Co., Inc. , 113 N. Chambers Street, New York City, New York. | Sherwin-Williams Company , 601 Canal Road, N. W., Cleveland, Ohio. |
| G. B. Lewis Company , Watertown, Wisconsin. | Synthetic Nitrogen Products Corp. , 285 Madison Avenue, New York City, New York. | T. W. Wood & Sons , 11 South 14th Street, Richmond, Virginia. |
| J. M. McCullough's Sons Company , 316 Walnut Street, Cincinnati, Ohio. | Armour Fertilizer Works , Atlanta, Georgia. | Perfection Sprinkler Company , Plymouth, Michigan. |
| Seaside Bent Company , 115 Broad Street, New York City, New York. | Buckner Mfg. Company , Fresno, California. | Roseman Tractor Mower Company , 810 Church Street, Evanston, Illinois. |
| Stumpp & Walter Company , 132-138 Church Street (at Warren St.), New York City, New York. | Campbell Irrigation Company , Woodbury, New Jersey. | Hyper-Humus Company , Newton, New Jersey. |
| Peter Henderson & Company , 35 Cortlandt Street, New York City, New York. | Economy Irrigation Company , Seattle, Washington. | Jacobsen Mfg. Company , Racine, Wisconsin. |
| O. M. Scott & Sons Company , Marysville, Ohio. | L. R. Nelson Mfg. Company , Peoria, Illinois. | Henry A. Dreer , 1306 Spring Garden Street, Philadelphia, Pennsylvania. |
| Ohio Humus Products Company , London, Ohio. | The Budd Mfg. Company , Ravenna, Ohio. | A. N. Peckham , Kingston, Rhode Island. |
| Illinois Grass Company , 75 E. Wacker Drive, Chicago, Illinois. | Double Rotary Sprinkler Company , 109 Coca Cola Bldg., Kansas City, Missouri. | Philadelphia Seed Company , 103-105 Arch Street, Philadelphia, Pennsylvania. |
| Lyman Carrier Products , Granger, Indiana. | Pennsylvania Lawn Mower Works , Primos, Delaware County, Pennsylvania. | Fate-Root-Heath Company , 833-869 Bell Street, Plymouth, Ohio. |
| J. G. Peppard Seed Company , Kansas City, Missouri. | E. G. Staude Mak-A-Tractor Company , 2630 University Avenue, St. Paul, Minnesota. | Walter B. Helms, Inc. , 237 South Jackson Street, Lima, Ohio. |
| American Cyanamid Sales Company , 535 Fifth Avenue, New York City, New York. | The F. & N. Lawn Mower Company , Richmond, Indiana. | J. F. Buel , Woburn, Massachusetts. |
| C. B. Dolge Company , Westport, Connecticut. | National Mower Company , 839 Cromwell, St. Paul, Minnesota. | Hardie Mfg. Company , Hudson, Michigan. |
| McClain Bros. Company , Canton, Ohio. | International Harvester Co. of America , 606 South Michigan Avenue, Chicago, Illinois. | Friend Mfg. Company , Gasport, New York. |
| Arthur Boggs & Company , Willoughby, Ohio. | Milwaukee Sewerage Commission , P. O. Box 2079, Milwaukee, Wisconsin. | Diamond-Calk Horseshoe Company , Duluth, Minnesota. |
| Mallinckrodt Chemical Works , 2nd and Mallinckrodt Streets, Saint Louis, Missouri. | | R. S. Horner , 61 Eagle Street, Geneva, Ohio. |
| | | Reade Mfg. Company , Jersey City, New Jersey. |

Market Place *and* Buyers' Guide

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

Stumpp & Walter Company
Peter Henderson & Co.
O. M. Scott & Sons Co.
Hyper-Humus Co.

Bent Seed—Prince Edward Island

J. M. McCullough's Sons Co.

Bent Stolons

O. M. Scott & Sons Co.
Stumpp & Walter Co.
Ohio Humus Products Co.
Illinois Grass Co.
Lyman Carrier Products

Bluegrass—Seed

J. G. Peppard Seed Company

Brown Patch Control

Stumpp & Walter Co.
J. Oliver Johnson, Inc.
American Cyanamid Sales Co.
C. B. Dolge Company
McClain Bros. Co.
Arthur Boggs & Co.
Mallinckrodt Chemical Works
Lyman Carrier Products

Charcoal

Cleveland Charcoal Supply Company
Wood Charcoal Research Bureau

Cocoas

Lyman Carrier Products

Compost Distributors

Toro Mfg. Company

Compost Mixers

Toro Mfg. Company
Royer Foundry & Machine Co.
Kemp Mfg. Company

Cultivators (Disc)

John H. Graham & Co., Inc.

Cultivators (Spike)

John H. Graham & Co., Inc.

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
Lyman Carrier Products

Fairway Irrigation

Buckner Mfg. Co.
Campbell Irrigation Company
Economy Irrigation Company
L. R. Nelson Mfg. Company
Double Rotary Sprinkler Co.
Lyman Carrier Products

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.
American Cyanamid and Chemical Corp.
Lyman Carrier Company
Bayer-Semesan Company
Synthetic Nitrogen Products
Armour Fertilizer Works

Fertilizer Distributors

International Harvester Co. of America
Synthetic Nitrogen Products Corp.

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
Mallinckrodt Chemical Works

Fairway Rollers

Toro Mfg. Company
Worthington Mower Company

Golf Course Construction

Ohio Humus Products Co.

Golf Equipment

Stumpp & Walter Co.
Peter Henderson & Co.
Ideal Power Lawn Mower Company
T. W. Wood and Sons
Worthington Mower Company

Golf Flags

Ideal Power Lawn Mower Company
Stumpp & Walter Company
Peter Henderson & Co.

Greens Fertilizers

Armour Fertilizer Works
Synthetic Nitrogen Products Corp.
Lyman Carrier Products

Greens Sprinklers

L. R. Nelson Mfg. Co.
Buckner Mfg. Co.
Double Rotary Sprinkler Co.
Perfection Sprinkler Co.

Hand Mower Blades

Budd Mfg. Company

Hole Cups

Standard Mfg. Company

Hole Cutters

Ideal Power Lawn Mower Company
Standard Mfg. Company

Hole Rims

Ideal Power Lawn Mower Co.

Horse Drawn Mowers

Pennsylvania Lawn Mower Works
International Harvester Co. of America
Worthington Mower Company
Ideal Power Lawn Mower Co.
Roseman Tractor Mower Co.

Hose

Peter Henderson & Co.

Humus

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

Hydro-Mixer

McClain Brothers Company

Insecticides and Fungicides

American Cyanamid and Chemical Corp.
Sherwin-Williams Company
Bayer-Semesan Company
Arthur Boggs & Co.
Mallinckrodt Chemical Works

Lawn Mowers

Pennsylvania Lawn Mower Works
Toro Manufacturing Company
Worthington Mower Company
Ideal Power Lawn Mower Co.
The F. & N. Lawn Mower Co.
Jacobsen Manufacturing Company

Lawn Seed

Henry A. Dreer
O. M. Scott & Sons Co.
J. Oliver Johnson, Inc.
Stumpp & Walter Co.
A. N. Peckham
Peter Henderson & Co.
J. M. McCullough's Sons Co.
Illinois Grass Co.
Philadelphia Seed Co.
Seaside Bent Company
Lyman Carrier Products

Lime Spreaders

International Harvester Co. of America

Marvel Turf Conditioner

Walter B. Helms, Inc.

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
International Harvester Co. of America
Roseman Tractor Mower Co.
The F. & N. Lawn Mower Co.
Jacobsen Mfg. Company
National Mower Company

Motor Trucks

International Harvester Co. of America

Mower Sharpeners

Fate-Root-Heath Company
Toro Manufacturing Company
Henry H. Doty

Nitrophoska

Synthetic Nitrogen Products Corp.

Peat Moss

Atkins & Durbrow, Inc.

Perforator

J. F. Buel

Poa Annua

J. M. McCullough's Sons Co.

Power Mowers

Cooper Mfg. Company
Toro Manufacturing Company
Worthington Mower Company
International Harvester Co. of America
Jacobsen Mfg. Company
Ideal Power Lawn Mower Company

Putting Green Mowers

Toro Mfg. Company
Pennsylvania Lawn Mower Works
Worthington Mower Company
Ideal Power Lawn Mower Co.
Roseman Tractor Mower Co.
The F. & N. Lawn Mower Co.
Jacobsen Mfg. Company

Power Putting Green Mowers

Jacobsen Mfg. Company
Worthington Mower Company
Ideal Power Lawn Mower Co.

Rakes

Pennsylvania Lawn Mower Works

Rhode Island Bent Seed

A. N. Peckham

Rollers (Hand)

John H. Graham & Co., Inc.
Stumpp & Walter Company

Rollers (Fairway)

John H. Graham & Co., Inc.
Toro Mfg. Company
Worthington Mower Company

Rollers

Stumpp & Walter Company
Toro Mfg. Company
Worthington Mower Company

Rough Mowers

Toro Manufacturing Company
Pennsylvania Lawn Mower Works
Worthington Mower Company
Ideal Power Lawn Mower Co.
Roseman Tractor Mower Co.
Jacobsen Mfg. Company
International Harvester Co. of America

Seaside Bent

Seaside Bent Company
Lyman Carrier Products

Shower Nozzle

McClain Brothers Company

Signs

Standard Mfg. Company

Spike Disc

John H. Graham & Co., Inc.

Sod Cutters

J. Oliver Johnson, Inc.

Sprayers

Hardie Mfg. Company
Friend Mfg. Company

Sprinklers

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

Spuds

Diamond-Calk Horseshoe Company

Stolons

O. M. Scott & Sons Co.
Lyman Carrier Products

Sulphate of Ammonia

Synthetic Nitrogen Products Corp.

Tee Markers

Standard Mfg. Company
G. B. Lewis Company

Tee Mowers

Toro Manufacturing Company
Pennsylvania Lawn Mower Works
Worthington Mower Co.
Ideal Power Lawn Mower Co.
Jacobsen Mfg. Company

Tee Stands

Worthington Mower Co.
G. B. Lewis Company

Tillage Implements

International Harvester Co. of America

Top Dressing

Hyper-Humus Company
The Ohio Humus Company
Atkins and Durbrow, Inc.

Tractors

E. G. Staude Mak-A-Tractor Co.
Toro Manufacturing Company
Worthington Mower Co.
International Harvester Co. of America
Ideal Power Lawn Mower Co.
Roseman Tractor Mower Co.
R. S. Horner

Tractor Wheels and Spuds

R. S. Horner

Turf Fertilizers

Armour Fertilizer Works

Underground Hose Locker

McClain Brothers Company

Urea

Synthetic Nitrogen Products Corp.

Wood Charcoal

Wood Charcoal Research Bureau

Worm Eradicators

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

EMPLOYMENT DEPARTMENT

Insertions of advertisements in this section will be inserted on receipt of copy and 50 cents in stamps.

GREENKEEPER WANTED

I have a position open for an all-around man, experienced in upkeep of an 18-hole sand green course. Must be A-1 with mowing equipment and machinery. Only one who takes interest in his work and sees that the job is done will be considered. Address all inquiries to Box 10, The National Greenkeeper and Turf Culture, Caxton Building, Cleveland, Ohio.

POSITIONS WANTED

Experienced greenkeeper with splendid references desires position in the Chicago district. Understands thoroughly soil and climatic conditions. Good man for any club. Address inquiries to Box A, The National Greenkeeper and Turf Culture, Caxton Bldg., Cleveland, Ohio.

Pro-greenkeeper with many years' experience, seeks position as professional, pro-greenkeeper or greenkeeper. Grand-nephew of the late "Old" Tom Morris of St. Andrews, Scotland. References, John Ball, eight times British Amateur champion, and Jimmie Johnson, ex-American Amateur champion. Previous connections, Town and Country Club, Saint Paul; Midlothian C. C., Chicago; Louisville C. C.; Country Club of Harrisburg,

Pa. Address Tom Morris, 1548 E. 64th Street, Chicago, Illinois.

Well-known greenkeeper with best of recommendations and thorough experience in maintenance and construction at low cost is open for position at prominent club at moderate salary. For full details address Box D, The National Greenkeeper and Turf Culture, Caxton Bldg., Cleveland, Ohio.

Agronomist with several years' experience wants connection with golf maintenance work, consulting, managing or research. Thorough knowledge of chemistry, soils, fertilizers, grasses and how to buy the various things for golf courses. Address inquiries to Box 5, The National Greenkeeper and Turf Culture, Caxton Bldg., Cleveland, Ohio.

Well-known turf culture and agricultural expert seeks a position. Has had field and sales experience and knows every problem on the proper and economical growing of fine turf, flowers, shrubs and vegetables. An extremely valuable man for any company which desires to cash in on practical experience. Address inquiries to Box 7, The National Greenkeeper and Turf Culture, Caxton Building, Cleveland, Ohio.

very light and may be quickly and easily transported from one putting green to another by small truck of any kind. When ready to treat a green, a length of ordinary hose is connected to any hydrant of the water supply of the golf course, and another line of the same hose with a shower nozzle to run from the hydro-mixer of the outfit to the putting green.

When ready to treat or fertilize a green, sufficient chemicals to treat the entire green are placed in a barrel and a small amount of water added sufficient to dissolve the chemicals into a strong concentrated solution.

After connection has been made to the hydrant of the regular water system, the water is started through the hose lines and the hydro-mixer onto the putting green. The operator then simply begins to pump the concentrated solution into the hydro-mixer and in ten or fifteen minutes the putting green is completely treated or fertilized, after which the outfit may be moved very quickly to the next green.

Complete literature may be secured on this money-saving system by communicating with McClain Brothers Company, 125 Second Street, Canton, Ohio.

Templin-Bradley Writes

Sept. 13, 1933.

Dear Mr. Power:

Beginning about ten days ago there has been a marked increase in the demand from Golf Clubs for grass seeds and fertilizers. I have noticed a decided preference for the American-grown bent grasses such as certified stocks of Coos County Seaside and Astoria strains, some, however, still prefer German bent.

Our stocks of the other grasses, the four grades of Kentucky Blue, Red Top and Chewings Fescue are being rapidly depleted. Seed is needed on most greens and fairways, and prices though higher than in the spring are still at a comparatively low level. In the writer's opinion there will be marked increase in prices by spring seeding time.

The demand for fungicides and insecticides for disease and insect control I think is below normal. These items, of course, are only being purchased in cases of extreme necessity.

Our company as you know is endeavoring to maintain in this district adequate stocks of all the finer grasses for fairways, greens and lawns, as well as fertilizers fungicides and insecticides.

In fact the interests of your magazine and our interests are almost identical as we are both working for good turf culture.

Sincerely yours,
P. C. PRATT,

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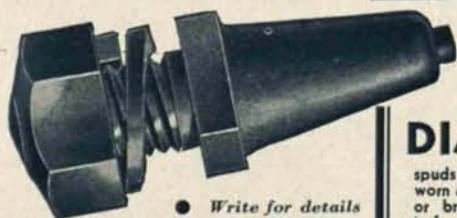
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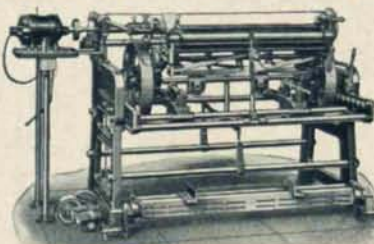
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