

## For Putting Greens Cleve - Brand - Charcoal

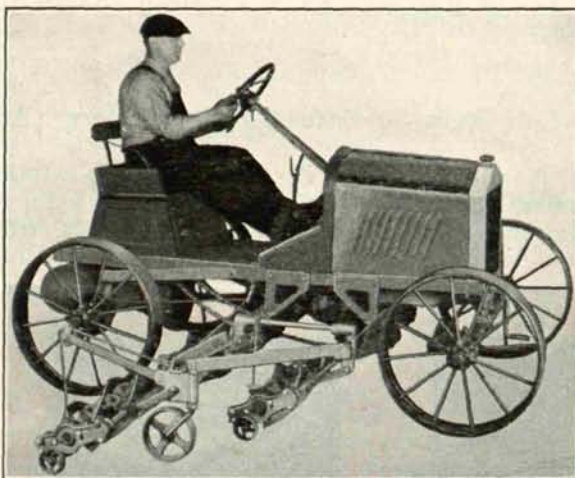
Makes the soil porous, retains moisture. Assures fine healthy turf without risk of any harmful results. Compost grade now only \$30.00 a ton f. o. b. Cleveland in 50 pound paper lined sacks.

**THE CLEVELAND CHARCOAL SUPPLY CO.**  
3905 Jennings Road - - - Cleveland, Ohio

### Bain Elected President

Christopher Bain, greenkeeper at the Oakland Country Club, was elected president of the Cleveland District Association of Greenkeepers at the annual meeting held recently. Frank W. Ermer of the Ridgewood Golf Club, former secretary-treasurer, was promoted to vice-president. The new secretary-treasurer is Walter L. Knowles of the Highland Park Club. )

The Cleveland association held its annual dinner for green committee chairmen at Hotel Hollenden, January 27. Mr. E. W. Doty, treasurer of the Cleveland District Golf Association acted as toastmaster and the speakers were Lyman Carrier of Coquille, Oregon and James A. Smith of London, Ohio.



### National's New Power Driven Quint Five 30-inch cutters, 12 foot swath

Cutting units are driven direct from engine, with reels protected by individual slip clutches. Requires but half the power of ground driven mowers.

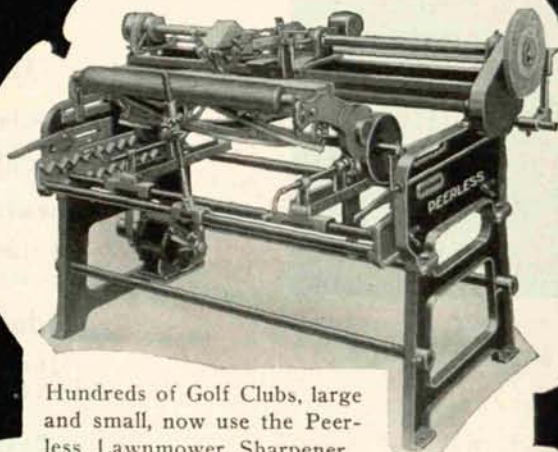
Handles in smaller spaces, Reverses. Easily goes up steeper hills without overloading the turf as with the traction driven type.

The simplest, the lightest yet strongest, the most efficient and by far the most practical Fairway mowing outfit offered. See it at the Greenskeepers show at Louisville or write for prices and full descriptive literature to

**NATIONAL MOWER COMPANY**  
839 Cromwell Ave. ST. PAUL, MINN.

Thousands of National Mowers have satisfied owners in every state of the Union

## The Peerless Mower Sharpener



Hundreds of Golf Clubs, large and small, now use the Peerless Lawnmower Sharpener

## It Perfects The Cutting Edges of any make of Mower

### And That Means Perfect Turf

The Peerless Mower Sharpener is the only machine that sharpens all makes of Power, Horse and Hand Mowers *scientifically — quickly — perfectly —* does the work as nothing else can. Operated by 1/3 H. P. Motor—attach it to your lamp socket. Special Grinding Wheel for sickles, scythes, etc. Skate sharpening attachment included. Will save its cost the first season. Write for catalog and list of users.

**THE FATE-ROOT-HEATH CO.**  
925 Bell St., Plymouth, Ohio

## The Peerless Mower Sharpener





O. J. NOER  
Madison, Wisconsin

# Nationally Known Speakers

*Splendid List of Addresses on Every Phase of  
Greenkeepers' Conference---Educational  
Attendance Expected*

## Official Program, Meetings, etc.

**Monday, February 3—7:30 P. M.**

Exhibitors' dinner—Headquarters, Kentucky Hotel.

**Tuesday, February 4**

10:00 A. M.—Golf Show Opens—Jefferson County Armory (Admission free).

**Wednesday, February 5**

10:00 A. M.—Golf Show—Jefferson County Armory (Admission free).

2:00 P. M.—Conference Opens—Jefferson County Armory.

7:30 P. M.—General meeting N. A. G. A. Committees—Headquarters. John Morley, president.

**Thursday, February 6**

10:00 A. M.—Golf Show—Jefferson County Armory (Admission free).

10:30 A. M.—Annual Meeting—Wives of National Greenkeepers.

2:30 P. M.—Educational Conference—Jefferson County Armory.

7:30 P. M.—Annual Banquet—Kentucky Hotel (Secure tickets at Registration Desk).

**Friday, February 7**

10:00 A. M.—Golf Show—Jefferson County Armory (Admission free).

10:30 A. M.—Annual N. A. G. A. Convention—Kentucky Hotel (Open to members only).

2:30 P. M.—Educational Conference—Jefferson County Armory.

12:00 Midnight—Annual Stag Party (See George Davies, Chairman).



DR. HOWARD B. SPRAGUE  
New Jersey Agricultural Experiment  
Station



PROF. GEORGE M.  
MCCLURE  
Ohio State University



A. E. GRANTHAM  
Richmond, Virginia



DR. JOHN  
U. S. G.



# rs On Conference Program

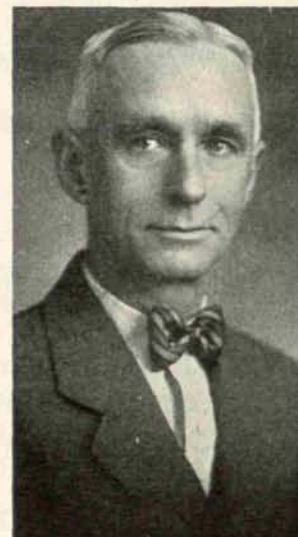
## e of Golf Course Maintenance Prepared for Features Attract Nation-Wide Attention. to Break All Records

### Greenkeepers Conference Program

*Chairman*

George M. McClure

Soil Technologist, Ohio State University



JAMES A. SMITH  
London, Ohio

#### Wednesday, February 5—2:00 P. M.

Introduction of chairman by President John Morley.

Addresses of Welcome—By Henry Heyburn, Louisville, Ky.; by Vertner D. Smith, Pres. Louisville C. C.; by Harry Dumesnil, Pres. Big Spring Golf Club; by Joseph C. Steidle, Pres. Audubon C. C.

The Fraternal Side of Greenkeeping—By Lewis M. Evans, Philadelphia, Seeds and Grasses—By Prof. L. S. Dickinson, Amherst, Mass.

Functions of the Three Plant Food Elements—By A. E. Grantham, Richmond, Va.

#### Thursday, February 6—2:30 P. M.

The Life and Activities of Soil Bacteria—By James A. Smith, London, Ohio.

Experiments in the Turf Nursery—By Dr. Howard B. Sprague, New Brunswick, N. J.

The Trend of Greenkeeping—By O. J. Noer, Madison, Wisconsin.  
Drainage and Soils—By Wendell P. Miller, Columbus, Ohio.

#### Friday, February 7—2:30 P. M.

A New Phase in the Control of Large Brown Patch—By Prof. L. S. Dickinson, Amherst, Mass.

Greenkeeping Problems in Canada—By W. J. Sansom, Toronto, Ont.

Activities of the Green Section—By Dr. John Monteith, Jr., Washington, D. C.

Taking Care of the Trees—By D. Q. Grove, Kent, Ohio.



MONTEITH  
R.  
Green Sec-  
on



W. J. SANSOM  
Toronto Golf Club



W. P. MILLER  
Columbus, Ohio



PROF. L. S. DICKINSON  
Massachusetts Agricultural College



Produces  
Better



Greens and  
Fairways

### Easily Applied, Effective and Economical, Free of Weed Seeds

Constant use of Milorganite simplifies turf maintenance.

Continuous and uniform growth of established turf on greens and fairways insures dense, luxuriant turf.

Milorganite produces sustained growth by providing a uniform and continuous supply of organic nitrogen over long periods.

New seedings require plant food to insure quick stand of uniform turf.

Poor turf once obtained is difficult and expensive to improve.

Milorganite applied prior to seeding promotes early growth and develops a uniform turf.

#### VISIT BOOTH No. 34 AT GREENKEEPERS' SHOW

*We look forward to renewing old friendships, and welcome the opportunity of meeting those in attendance for the first time.*

### THE SEWERAGE COMMISSION - Milwaukee, Wisconsin

*Our trained staff will help devise a sane, effective fertilizer program*



*Gordon MacMillan, Representative of the Dominion Seed Branch for Prince Edward Island Inspecting a Field of Prince Edward Island Bent. This Scene is Typical of Prince Edward Island, a Beautiful Farming Country with the Sea in the Distance*

#### PRINCE EDWARD ISLAND BENT SEED

*(Agrostis tenuis)*

Dense upright fine growth ideal for tees and approaches, also for greens where water supply is scanty. Economical as a pound contains over 6,000,000 seeds and extreme hardiness prevents winter killing. Sealed and Certified by the Canadian Government.

#### BUCKEYE BRAND SEA- SIDE CREEPING BENT SEED

*(Agrostis maritima)*

Beautiful putting turf at one-fourth the cost of vegetative planting. Blends well with standard vegetative strains for renovating. Sealed and Certified by the State of Oregon.

**VELVET BENT, CANADIAN GOVERNMENT SEALED**—Very limited supply.

**NEW BRUNSWICK CREEPING BENT**—New variety, finer than Seaside Bent.

We are sole wholesale distributors in the United States for the Fine Bent Seed produced on Prince Edward Island and Certified and Sealed by the Canadian Government.

Our booklet, "The Fine Bent Grasses" sent free on request.

Redtop—Kentucky Bluegrass—Chewings Fescue—Poa Annua—Colonial and German Bent.

### THE J. M. McCULLOUGH'S SONS COMPANY - 316 Walnut St. - Cincinnati, Ohio

*A reputation of 92 years fair dealing back of every sale*



# What To See At Louisville

A BRIEF DESCRIPTION OF SOME OF THE EXHIBITS OF MACHINERY, SUPPLIES  
AND EQUIPMENT FOR GOLF COURSE MAINTENANCE

## Standard Manufacturing Company

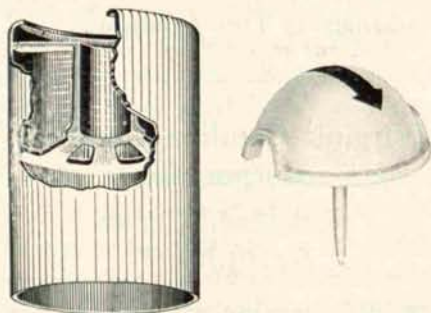
Cedar Falls, Iowa

BOOTH NO. 43

THIS company will exhibit a complete line of Standard golf course accessories, especially featuring their new steel flagpole, hole rims, bag rack and tee markers, together with a variety of aluminum signs which they make particularly for golf courses.

The new Standard tee marker is an improvement over the one made last year, being furnished with an arrow to indicate the line of play. It is made of aluminum, is always bright and is light and easy to handle.

Greenkeepers will be particularly interested in the rust-proof Standard hole rim, which is cast in Aluminum in one piece. The rim is ab-



STANDARD HOLE CUTTER AND  
TEE MARKER

solutely smooth on the outside and is tapered slightly so that it can be removed easily and without injury to the grass. The pole socket is very deep and held in place by a special web reinforcing cast integral with the shell. Its open construction provides complete drainage when the flagpole is in place.

Mr. W. H. Voorhees, president and general manager of the company, will have charge of the exhibit.

## Ideal Power Lawn Mower Company

Lansing, Michigan

BOOTHS, NO. 9, 11 AND 13

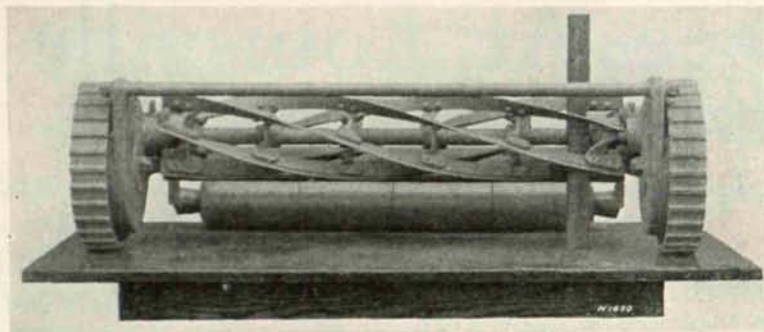
THE Ideal Exhibit this year will be larger and better than ever before. Announcement of new low prices on Ideal "Bulldog" fairway mowers will be made for the first time at the Show.

A new light weight "Bulldog" Golf tractor will be on display with a new 3-unit Rough mower. This new rough cutter is built just for cutting roughs. It is not necessary to hoist up the rear of the units to get the correct height of cut—these special units cut at the correct height when in normal position. The

## The Exhibitors and Where to Find Them

Toro Manufacturing Co.	Space No. 1
International Harvester Co.	4
Thompson Mfg. Company	8
Ideal Power Lawn Mower Co.	9, 11 and 13
Lyman Carrier, Inc.	15
I. L. Radwaner Seed Co., and Fraser Pub. Co.	16
Cooper Mfg. Co.-Friend Mfg. Co.-Hal Billig, Inc.	17 and 18
E. G. Staude Mak-A-Tractor Company	19
Koppers Products	20
George A. Davis, Inc.	21
Virginia-Carolina Chemical Corporation	22
Hyper-Humus Products Co.	23
Fate-Root-Heath Co.	24
Jacobsen Mfg. Company	25
Ric-Wil Company	26
Pennsylvania Lawn Mower Works	27 and 29
Moto-Mower Company	28
Atkins and Durbrow	30
Worthington Mower Company	31, 33 and 35
Henry H. Doty	32
Milwaukee Sewerage Commission	34
Universal Sand Equipment Co.	36
H. B. Sherman Mfg. Company	37
Ohio Humus Products Company	38
Buckner Mfg. Company	39
J. Oliver Johnson, Inc.	40
American Seed Company	41
F. & N. Lawn Mower Company	42
Standard Mfg. Company	43
L. R. Nelson Mfg. Company	44
Grasselli Chemical Company	45
O. M. Scott & Sons Company	46
Pelican Works	48
Roseman Tractor Mower Company	52
National Mower Company	53
Golf Course Supply Company	50
Jefferson County Retail Nurserymen's Association	51
American Radiator Company	49
Logan Company	10
Price Chemical Company	12
Chambers Seed Company	14
Golfdom	14
The National Greenkeeper	47





NEW IDEAL UNIT FOR CUTTING ROUGHS

units are used with the regular standard Ideal "Bulldog" Fairway mower frames, either 3-unit or 5-unit size.

A complete Ideal "Bulldog" 5-Unit Fairway mower will be shown. Ideal claims that their exclusive patented construction—which makes possible the use of a low-wheeled, compact cutting unit—insures a better cutting job, and that a "Bulldog" outfit will give service over a period of years at less upkeep cost per season than any other large capacity mower.

The Ideal Roller-Type Greens mowers with latest improvements will be shown. A complete mower will be on display, as well as mowers on special display stands.

Two Ideal Power mowers will be shown, the Ideal "Twenty-five" and the Ideal "Twenty". The "Twenty" is now offered with two clutches if desired—one clutch for the drive wheels and one for the cutting reel. This extra clutch adds to ease of handling and greatly increases the utility of the outfit. Ideal Power mowers are very popular for mowing approaches, club house lawns, and for general mowing about the golf course.

The Ideal Golf cart, and the well known Kemp Shredder will be shown. Also, several small items such as flags, flag poles, hole rims, etc., will be displayed.

Ideal invites everyone to visit their display. Representatives will be there to welcome you.

### Toro Manufacturing Co.

3042-3160 Snelling Ave.

Minneapolis, Minn.

BOOTH NO. 1

THE Toro exhibit at Louisville, the largest in the show, will be complete in every detail and will have on display not only a number of new items that the company is bringing out this year, but in addition they will have a showing of some of their standard items so familiar to the trade in years gone by.

The main objects of interest, however, will be in their new machines—the power putting green mower, the new Toro Junior tractor, the Silver Flash and the Del Monte Greens rake, all of which



NEW TORO POWER PUTTING MOWER

will prove interesting to those attending the Convention.

A number of Toro distributors have signified their intention of being on hand for the Convention, and among those who are expected to be in attendance are W.E. Lafkin, of the New York Toro Company,



NEW TORO JUNIOR TRACTOR

T. L. Gustin, of the Philadelphia Toro Company, E. J. Smith, of Southeast Toro Company, Whitney Goit, of Kansas City, J. Oliver Johnson, of Chicago, F. J. Fell-



TORO SILVER FLASH MOWER

man, of the Lawn Equipment Corporation, Detroit, A. E. Flack, of the Golf Course Supply Company, Cleveland, and B. K. Cohee of the Indianapolis Toro Company.

### Virginia-Carolina Chemical Corporation

Richmond, Virginia

BOOTH NO. 22

THIS company will have a very attractive exhibit at the Greenkeepers' Show in Louisville, featuring a fertilizer they call "Fairway" for golf courses and lawns.

In addition they will have photographs of golf courses and country clubs in many parts of the country where Fairway has been used. This company is one of the largest manufacturers of fertilizers in the country and maintains an extensive experimental department so that complete information regarding the action of various fertilizers will be available to greenkeepers who call at this Booth.



**Worthington Mower Co.**

Stroudsburg, Pa.

BOOTHS NO. 31, 33 AND 35

THE Worthington Mower Company, which continues to specialize exclusively in lawn tractors and mowing machinery will show primarily their latest additions to this important field. Their exhibit will consist of the new Worthington lawn tractor with Model A Ford Motor; the "Multigang" or seven unit two row gang mower; the improved standard 30" cutting unit; the Overgreen having a cutting swath of 50 inches; the 18 inch "Special" hand mower.

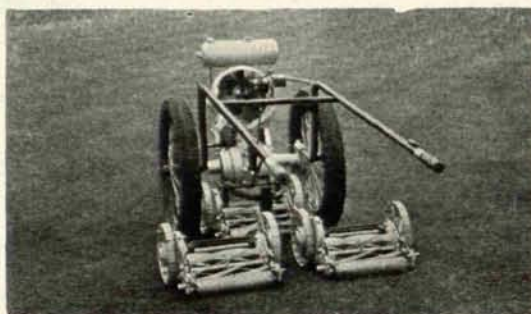
The new model Lawn Tractor with Ford A Motor does not supersede their former model with Ford T Engine, but is offered as additional equipment. It is quite similar in general design in that it has the shortened wheel base enabling a small turning radius, absences of all unnecessary parts, thereby a reduction in total weight, but is equipped with the special patented features which gave to its colleague the enviable reputation of being the lightest and most efficient lawn tractor on the market.

The Worthington Lawn Tractor with model T Ford Motor has been improved and is offered as the standard machine for fairway cutting.

The "Multigang" is being introduced primarily for large fairways and aviation fields. Where the cutting time is of importance this machine, having a cutting swath of 16 feet, will mow a given area in 30 per cent less time than the "Quint" or five unit machine.

The fairway unit has been improved in some of its details. Special alloy steels are employed making this mower the finest, lightest and strongest unit to be found anywhere.

The "Overgreen" has been greatly improved and is now offered as the greatest contribution to golf main-



WORTHINGTON "OVERGREEN"  
POWER MOWER

tenance since Worthington gave to the game of golf the gang mower for their fairways. Its rapid growth since its introduction to the cutting of greens, tees and approaches stamps it as the most remarkable and important machine ever offered.

The 18 inch "Special" hand mower is a most efficient and easy running machine, a high class product for heavy work on greens, tees, lawns, etc.

The following representatives will be at the Golf Show: E. H. Worthington, vice president; R. S. Worthington, vice president; R.

## Who Will Win The Hundred Berries?



CHAS. ERICKSON  
Minneapolis,  
Minn.



JOE VALENTINE  
Philadelphia,  
Penna.

HERE they are—the men who will construct the putting greens at the 4th Annual Golf Show and Convention of the National Association of Greenkeepers of America at Louisville. On the left is "Charlie" Erickson, who for over thirty years has been greenkeeper at the great Minikahda Golf Club, Minneapolis. He is Captain of the Western team. On the right is Joe Valentine, veteran greenkeeper of the famous Merion Cricket Club of Philadelphia, where many National Championships have been played. Joe knows a putting green when he sees one and he knows too the very latest designs and how to build them.

Fred A. Burkhardt, chairman of the Show Committee has set aside two spaces in the center of the Show floor, each one twenty by thirty-two feet and will furnish the contestants with molding sand and white sand and whatever equipment is necessary to form up these greens to a scale in whatever way they want. The contestants will be given absolute freedom to choose any type of green they desire, but they must provide a drawing to scale three foot square showing the drainage lines because these cannot be indicated on the green itself.

John Morley will appoint a committee of disinterested people to act as judges and they will decide which green is the better for every purpose whereupon the Captain whose team wins the contest will receive a hundred dollars cash from the Show Committee.

Mr. Erickson had planned a trip to California but when he was notified that he was Captain of the Western team and realized how much fun they were going to have in Louisville, he cancelled his California trip and says he will be on the job with his sleeves rolled up. Neither Captain has announced the make-up of his team but they must be greenkeepers as the Committee announces that architects and pros are barred.



VanderBeken, secretary-treasurer; J. I. Blair, manager of factories; J. C. Dee, Chicago manager; J. B. Hurlock, Cleveland manager; J. C. Russell, Canadian manager.

### O. M. Scott & Sons Company

Marysville, Ohio

BOOTH No. 46

THIS exhibit at the National Greenkeepers Convention will consist of samples of Scott's Golf

Course Seeds and Scott's Turf Builder.

One interesting factor of the exhibit will be samples of Kentucky Blue Grass showing the various steps in the recleaning process from the rough seed, just as it comes from the stripper, to the very finest and heaviest quality of seed that it is possible to secure with the use of the very best recleaning equipment.

Mr. P. C. Williams will be in charge of the exhibit.

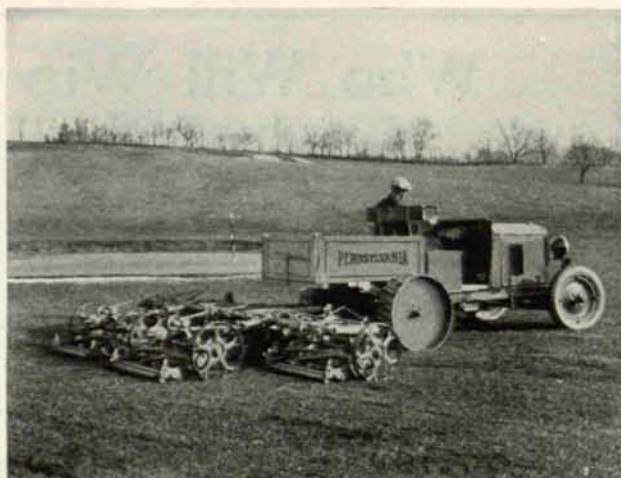
### Pennsylvania Lawn Mower Works

1615-35 North 23rd Street

Philadelphia, Penna.

BOOTHS NOS. 27 AND 29

"QUALITY Leadership for 52 years," stands out as a beacon in the exhibit of the Pennsylvania Lawn Mower Works at the 4th Annual Greenkeepers' Golf Show. Always conservative but yet progressive the Pennsylvania line of mowing equipment attracts attention wherever it appears.



PENNSYLVANIA QUINT WITH 6 CYL. TRACTOR

The Louisville exhibit will include the following mowers—

1 Fairway Quint complete, with the new 6 cyl. Pennsylvania Chevrolet Tractor.

1 Super Roller complete.

1 New Aristocrat, 7-b la d e , greens mower complete.

1 Special Aristocrat with 6 blades, for cutting tees and approaches.

1 New Super Great American.

In the new Pennsylvania Tractor the company believes that it has developed for 1930 the only 6-cylinder tractor on the market. It has tremendous power and in carefully conducted trials last season negotiated the steepest hills without effort.

The Fairway units have been refined for the coming season and the company has received a great many

unsolicited testimonial letters from greenkeepers in various sections of the country expressing their satisfaction with the new Pennsylvania mowers. With a new 6-cylinder tractor and improved fairway unit, Pennsylvania is in position to answer the problem of fast economical mowing which the better golf clubs now demand of their greenkeepers. The Pennsylvania exhibit as in past years will be in charge of Mr. N. D. Perine.

### E. G. Staude Mak-A-Tractor Co.

2675 University Avenue  
Minneapolis, Minn.

BOOTH No. 19

THIS company will exhibit the \$695.00 Model "A" Staude General Utility golf course tractor complete with cubic yard steel dump



STAUDE GOLF COURSE TRACTOR

body, in their space at the Greenkeepers' Convention.

Hundreds of greenkeepers have had a part in building the Staude General Utility Golf course tractor. That is why every possible use for a golf course tractor is taken into account in the building of this machine.

The Staude Company are specialists in this work and announce that the following are some of the striking features of the new Model "A."

Light weight—powerful as dynamite—a bear on hills. Adjustable Drawbar—any make of mower, roller, etc., can be easily attached to it. Can be used from the construction to the maintaining of a golf course. Built to do the work and lasts a life time. Easiest tractor to control and most economical to operate. Service available at any Ford dealer. Inexpensive to buy and repair costs are practically nothing.

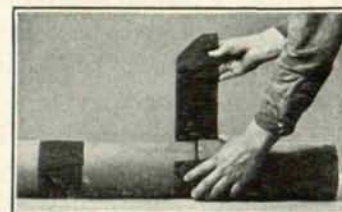
### The Ric-Wil Company

Union Trust Bldg.

Cleveland, Ohio

BOOTH No. 26

RIC-WIL Filter Tape will be exhibited and demonstrated by this company in their booth at the Louisville Show. It is used to wrap the joints of farm or bell-and-spigot tile, and being porous it allows the



water to filter through into the tile but keeps out sand and silt.

Ric-Wil Filter Tape is a porous woven fabric, processed with a solution that makes it water and acid



proof, preventing disintegration of the fabric and assuring a permanent joint. This solution also renders the fabric adhesive to tile surfaces and to itself, which eliminates the tying or wiring so necessary in using other kinds of material, an important saving of labor costs of installation.

Ric-Wil tape comes in handy rolls of fifty yards each in widths of 4, 6 and 9 inches. It can be furnished in widths up to 36 inches on special order. Greenkeepers who have drainage troubles, particularly with sand filling up the tile in bunkers, will find much to interest them in the Ric-Wil exhibit.

### International Harvester Company

606 South Michigan Avenue  
Chicago, Illinois  
BOOTH NO. 4

THIS well known company is entering the Greenkeepers' Golf Show for the first time and will exhibit a McCormick-Deering fairway tractor with a seven-foot mower, the entire unit being designed especially for golf course requirements.

The McCormick-Deering Fairway tractor is a practical all-purpose power plant for golf-course construction and maintenance. It satisfactorily meets all requirements for fairway maintenance, for mowing the rough, and for construction and improvement work. It is easily controlled and turns in a circle with an 8-ft. radius. It works in close

corners, turns quickly, cuts close to obstacles and out again, leaving a surprisingly small amount to be done with hand labor.

A flexible 7-foot bar mower, the power for the operation of which is taken directly from the tractor engine by means of the power take-off, has been designed for use with this tractor. With this mower and a trailer mower, one man can mow 75 to 100 acres a day.

### Pelican Works

Niles, Michigan  
BOOTH NO. 48

THIS company manufactures the Raining Sprinklers for golf greens and fairways, which are made in various sizes to cover areas from forty to one hundred feet.

Mr. J. T. Plumer head of the company saw the great need of a watering system for golf courses in 1917 and began experimenting with a sprinkler which would throw water at close and long range and give even distribution. His sprinkler was tried out in the Detroit district and met with great success so that they are now manufacturing them on a large scale.

A complete line of Raining sprinklers will be on exhibit and they will demonstrate the laborless over-night system for greens, also the underground absorbing system for fairways that is one hundred per cent automatic and waters the entire golf course. Mr. Plumer himself will be in charge of the exhibit.

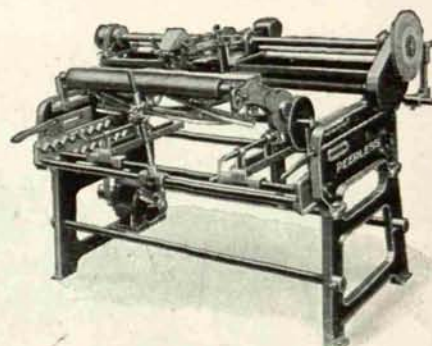
### The Fate-Root-Heath Co.

925 Bell Street  
Plymouth, Ohio  
BOOTH NO. 24

TURF preservation has been given much careful study by experts, and we are confident they will readily concede that something more than soil and seed must be considered in the care of the greens.

To keep good turf it must be protected, and in this, *MOWING* plays an important part. Grass must be kept the desired length by mowers properly sharpened so as to shear off the grass in a manner that will not injure the roots.

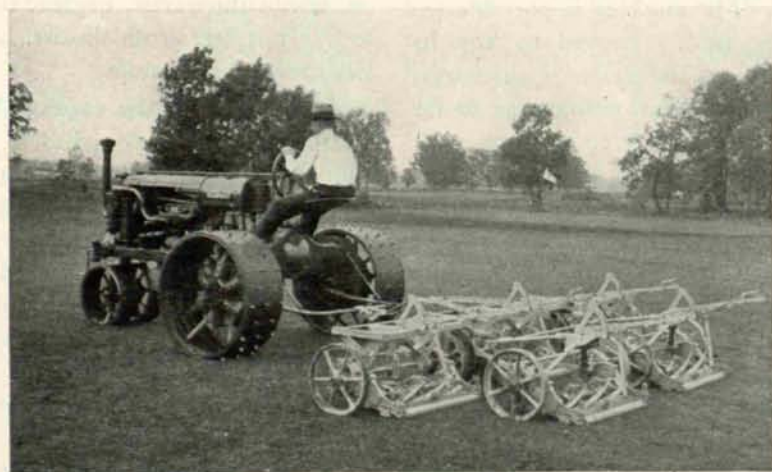
Dull mowers pull and tear the turf. This is the reason many clubs



PEERLESS MOWER SHARPENER

are using the Peerless Mower Sharpener, replacing the old way of sharpening mower blades with the latest scientific, inexpensive method, which does the job easily and quickly, and puts the right kind of an edge on the blades.

This machine sharpens all kinds



McCORMICK-DEERING FAIRWAY TRACTOR

### Soil Samples

James A. Smith, president of the Ohio Humus Products Company, who is going to set up a soils testing laboratory in his booth at the Greenkeepers' Show at Louisville, requests those bringing samples of soil to Louisville for examination be sure and bring a sample of the soil directly below the rootage of the turf. It will not be the soil carrying the rootage that has the trouble, but will be the soil immediately below which will probably be so hard that moisture and rootage cannot penetrate it.



of mowers, including the herring-bone type with "V" shape spiral knives. Equipped with motor it is easily operated from a lamp socket, or can be operated from a line shaft. A gas engine can also be used.

The Peerless Mower Sharpener is equipped with reverse feed, and a roller support is furnished which makes it possible to sharpen putting green mowers with 8" rollers behind the cutter bar. The machine is four feet wide between the frames and will grind the spiral knives of 40" mowers by removing them from

the mower. The spirals of the 30" units and hand mowers can be ground without removing them from the mower. Equipped with the special grinding wheel attachment, cutlery and various tools such as hedge shears, grass shears, and sickles used around golf links and parks can be ground.

Practical demonstration of this Peerless Mower Sharpener, manufactured by The Fate-Root-Heath Company of Plymouth, Ohio, will be given in our booth at the Annual National Greenkeepers Golf Show.

### **The Universal Sand Equipment Co.**

1833 Columbus Road, N. W.

Cleveland, Ohio

BOOTH No. 36



**T**HIS company will have on display one of their Universal Compost Mixers together with some pictures and advertising matter.

The Universal Compost Mixer is said to be the most modern machine for the economical and efficient preparation of compost. The machine is rugged and substantial in construction; it is a compact integral unit provided with a pulley so that it can be driven by a tractor. The mechanical principle of operation consists of rotation of an impellor assembly within an impellor housing having intake and discharge openings.

The compost or top dressing material is shoveled into the intake hopper of the machine and in passing through the machine is subjected to the impact action of the impellor

blades which breaks up all of the lumps.

Due to the centrifugal and blast effect developed by the impellor, the material is thoroughly mixed and discharged through the air, falling in a fluffy pile ready for immediate use. The machine is portable and can be readily moved to any location and the material discharged in any direction, either near or far, and piled to suit conditions.

The Universal Compost Mixer eliminates repeated hand shoveling and screening of materials, as once through the machine is generally sufficient for complete preparation. Briefly summarized the Universal Compost Mixer accomplishes the physical preparation of compost or top dressing in a better manner, shorter time and at less cost than any other method now in use.

**J. Oliver Johnson, Inc.**  
Morgan Huron Superior Sts.  
Chicago, Ill.  
BOOTH No. 41

**J**. OLIVER Johnson, Inc., of Chicago will have booth No. 41 at the Show and both J. Oliver Johnson and H. S. Bailey will be in attendance and look forward with pleasure to meeting various members of the National Greenkeepers Association.

### **Hyper-Humus Company**

48 Park Place

Newton, New Jersey

BOOTH No. 23

**T**HE Hyper-Humus Company will exhibit their product, Hyper-Humus showing its use as a compost for top dressings for old greens and its value in incorporating it into the soil for new greens.

Hyper-Humus is a prepared, cultivated, natural organic which is well oxidized by continuous cultivation. There was a 40 per cent increase in the sale of humus in 1929 over the previous year and the present indications point to a very large demand for the coming season for our cultivated humus, especially among golf courses.

Hyper-Humus when mixed with the top dressings makes an ideal carrier for the uniform application of Lead Arsenate, Sulphate of Ammonia, etc. It absorbs these materials, and furnishes one of the purest, if not the purest, organic to the soil. It is free from disease, odorless and easy to handle.

Actual tests in the various Agricultural schools have shown that 100 pounds of sand will hold 25 pounds of water; 100 pounds of clay, 50 pounds of water and 100 pounds of humus or decayed organic matter will retain 190 pounds of water. This is a fair idea of what humus will do for your greens in the way of retaining moisture during dry, hot weather.

W. P. Troxell, sales manager, will be in charge of the exhibit.