original small cabin is now reconstructed and stands inside the shrine. This spot is only a few hours' trip from Louisville and return.

"Among the wonders that nature has placed as a proof of her mysterious workings is Mammoth Cave in Kentucky. This great underground cavern is within easy reach of Louisville. An early morning train takes the guests to the cave, the railroad providing lunch and a visit to the cavern wonders, with a return to Louisville early in the evening, all for a moderate charge. There is no accurate description of the cave. Since its discovery in 1809 many have tried word pictures of the strange and beautiful sights hidden below the earth's surface, but none has done the work justice. Mammoth Cave must be seen to be properly appreciated.

"For any who may be strictly air-minded, the government-supervised airport at Bowman Field is at the disposal of any guests.

Special Reduced Railroad Fares

CHAIRMAN Fred A. Burkhardt of the Show committee working in conjunction with Mr. George V. Jones, City Passenger Agent of the Baltimore and Ohio railroad has secured special reduced railroad fares on all of the railroads to the United States and Canada. It is only necessary to ask the station agent for a certificate stating that you are attending the Greenkeepers' Convention at Louisville, when you buy your ticket to that destination. When you return home you present your certificate to the station agent at Louisville and receive a full fare ticket home at half price, thereby saving twenty-five per cent of your total round trip fare.

Splendid Educational Program

PRESIDENT John Morley is working up a splendid educational program for the three-day Conferences, held on Wednesday, Thursday and Friday afternoons. He has selected Professor George M. McClure, Soil Technologist, Department of Soils, Ohio State University, to act as Permanent Chairman of the Conferences. Mr. McClure is a specialist on turf culture and has had a lot of practical experience in the construction and maintenance of golf courses in and about the Columbus

Guaranteed

Washington Strain

CREEPING BENT STOLONS

From Our Own

Nursery

Write, phone or wire for prices



district. While the complete Conference program is not ready for publication it is known that such well-known authorities as Professor Lawrence S. Dickinson, Massachusetts Agricultural College, Doctor John Monteith, Jr., Arlington Turf Gardens, and Doctor Howard B. Sprague, New Jersey State Experimental Station, will present addresses of great interest to greenkeepers and chairmen. The practical side of greenkeeping will be covered by such well-known men as Alex Pirie, Chicago, Lewis M. Evans, Philadelphia, W. J. Sansom, Toronto, O. J. Noer, Milwaukee, et al.

Show Space Selling Fast

SEVERAL thousand dollars of show space has already been contracted for and the most prominent manufacturers and dealers in golf course equipment and supplies will be represented. It will be possible for visiting greenkeepers and golf club officials to see and personally inspect the very latest products in the golf field. The Greenkeepers' Show is the only exhibition during the year that has these complete lines on display.

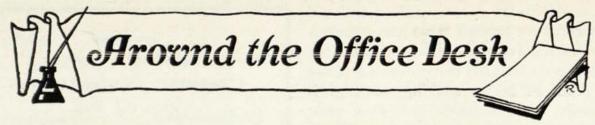
Prevent Worm Casts... Safeguard Your Greens

Use the time-tested, efficient



Brings up worms where they can be swept up, instead of causing them to decay in the soil. Acts as a preventive of "brown patch." Stimulates turf growth. Only one or two applications in season required. Write for particulars and prices.

Reade Manufacturing Company
195 Hoboken Ave. Jersey City, N. J.



Unity and Co-operation

I WILL venture to say that every greenkeeper has in mind the National Convention of Greenkeepers at Louisville, Kentucky, in February, and is looking forward to meeting old friends, and cultivating new. Let us make this a banner Convention. Let every greenkeeper be there in numbers up to four figures.

This is the third year of the N. A. G. A.'s existence. As has always been said of any enterprise, if it can weather its third year it is assured of success. It is not necessary to remind a great many of this fact, but, there may be some who do not realize the importance of their attendance and co-operation in this third year. Unity is the key to the success of our association, "United we stand, but divided we fall"; think over this old proverb.

We need new members; men who are worthy of being one of us, and who will be a credit to the Association. Members contemplating proposing new members should be sure they will be accepted by the membership committee. The support of our present membership is most essential.

Our Association stands for Justice, Benevolence, and Education, let us not forget this. Help your fellow men and work for the N. A. G. A., not for the individual. If this is done, the Association will be a great success.

I want to remind you of an important part and that is the golf show, which is held under the auspices of the N. A. G. A. There will be a greater number of exhibitors this year than ever before, and it is your duty to support these exhibitors, by your and your Greens Chairman's presence. The exhibitors are put to a great deal of expense in bringing their exhibits to the show and showing them. This cannot be done without salesmen. Show them your appreciation by attending the exhibition; it may be that you are in the market for a certain piece of equipment, and by seeing this you may decide to buy. So try and induce your Chairman to make the trip to Louisville with you; neither of you will regret it.

One more reason for your presence being essential is, to help repay Fred Burkhardt, Chairman of the Golf Show Committee, for untiring efforts and energy to make this show the most successful yet attempted.

JOHN MACGREGOR,

Greenkeeper, Chicago Golf Club.

Greenkeepers Honor McNamara

The following resolution sent in by John Quaill, Secretary, was read and adopted at the meeting of the Greenkeepers Club of Western Pennsylvania, October 14, 1929:

WHEREAS, Almighty God, in His wisdom, has seen fit to take from this life JOHN McNAMARA, Vice President of the Greenkeepers Club of Western Pennsylvania, and a faithful member since its organization; and

WHEREAS, John McNamara, who died Sunday, September 1st, 1929, at the age of fifty-seven years, ended a life which was marked for its high character and sterling worth to his friends and neighbors who knew him as a most honorable and upright citizen, a worthy friend and an excellent greenkeeper who strove for all things worth while living for:

THEREFORE, we who have known him, and sat with him at our meetings, it behooves us, that the motion having been made and duly seconded, it was unanimously

RESOLVED, That there be spread upon the minutes of The Greenkeepers Club of Western Pennsylvania, the record of death of one of the members who was a founder of this organization which has progressed by reason of the integrity of JOHN McNAMARA, who always upheld the high ideals of greenkeeping, and gave his time and knowledge to help others to advance that they could carry on the work left unfinished by his untimely end, and, be it further

RESOLVED, That we extend to his family and their friends, our heartfelt sympathy in this hour of bereavement, and that when this meeting adjourns, it does so out of respect to the memory of the late JOHN McNAMARA, and in respect to the surviving members of his family.

Address all communications relating to Association membership, dues, etc., to--

JOHN QUAILL, Secretary
426 Highland Avenue
West View, Pittsburgh, Penna.

Address all communications relating to the Golf Show at Louisville, February 4-7, 1930 to-

FRED A. BURKHARDT Chairman, Show Committee 405 Caxton Bldg., Cleveland, Ohio

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
Ball Washers
J. Oliver Johnson, Inc.
Bent Stolons
Hubbard Nurseries
O. M. Scott & Sons Co.
Stumpp & Walter Co.
Ohio Humus Products Co.
Bridge Floors
Armco Culvert Mfrs. Association
Brown Patch Control
Stumpp & Walter Co.
J. Oliver Johnson, Inc.
American Seed Co.
Reade Mfg. Co.
Catchbasins, Corrugated Iron
Armco Culvert Mfrs. Association
Chickweed Eliminator
Adalink Chemical Company
Cocoos Creeping Bent Seed
Stumpp and Walter Co.
Compost Distributors
Toro Mfg. Company
Compost Distributors
Toro Mfg. Company
Coos County Bent-State Sealed &
Certified
J. M. McCullough's Sons Company
Drainage Engineers
Wendell P. Miller and Associates

Certified
J. M. McCullough's Sons Company
Drainage Engineers
Wendell P. Miller and Associates
Drainage Gates
Armco Culvert Mfrs. Association
Dump Carts
Toro Mfg. Company
J. Oliver Johnson, Inc.
Fairway Irrigation
Buckner Mfg. Co.
Fairway Mower Blades
The Budd Mfg. Company
Fairway Mowers
Pennsylvania Lawn Mower Works
Toro Mfg. Company
E. G. Staude Mak-A-Tractor Co.
Fairway Rollers
Toro Mfg. Company
Fertilizers
Milwaukee Sewerage Commission
J. Oliver Johnson, Inc.
Golf Course Construction
Ohio Humus Products Co.
Golf Course Construction
Ohio Humus Products Co.
Stumpp & Walter Company Golf Equipment
Stumpp & Walter Company
Golf Flags
Stumpp & Walter Company

Outstanding Achievements in the Production of Fine Turf

BUCKEYE BRAND State Sealed & Certified SEASIDE CREEPING BENT (Agrostis maritima)

PRINCE EDWARD ISLAND BENT SEED
(Agrostis Tenuis)
Sealed & Certified by the Canadian Government

The hardiest upright-growing non-creeping variety. Does not require as much topdressing or water as Creeping Bent.

The J. M. McCullough's Sons Company

316 Walnut St. Cincinnati, O. Wholesale Distributors in the United States.

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The Budd Mfg. Company
Greens Sprinklers
L. R. Nelson Mfg. Co.
Buckner Mfg. Co.
Horse Drawn Mowers
Pennsylvania Lawn Mower Works
Hose
Republic Rubber Company
Humus
Hyper-Humus Company
Ohio Humus Products Co.
Lawn Mowers
Pennsylvania Lawn Mewer Works
Toro Manufacturing Company
Mowing Equipment
E. G. Staude Mak-A-Tractor Co.
Toro Mfg. Company
Pennsylvania Lawn Mower Works
American Seed Co.
Mower Sharpeners
Fate-Root-Heath Company
Toro Manufacturing Company
Henry H. Doty
Power Mowers
Toro Mfg. Company
Power Mower Blades
The Budd Mfg. Company
Prince Edward Island Bent Seed
J. M. McCullough's Sons Company
Putting Green Mowers
Toro Mfg. Company
Ponnsylvania Lawn Mower Works
Rakes
Pennsylvania Lawn Mower Works
Stumpp & Walter Company
Toro Mfg. Company
Toro Mfg. Company
Rough Mowers
Toro Manufacturing Company
Toro Mfg. Company
Rough Mowers
Toro Manufacturing Company
Pennsylvania Lawn Mower Works
Seed
O. M. Scott & Sons
J. Oliver Johnson, Inc.
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O. M. Scott & Sons J. Oliver Johnson, Inc. Stumpn & Walter Co. J. M. McCullough's Sons Company J. M. McCullough's Sons Company
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Armeo Culvert Mfrs. Association
Sod Cutters
J. Oliver Johnson, Inc.
Sprinklers
L. R. Nelson Mfg. Co.
Buckner Mfg. Co.
Buckner Mfg. Co.

Sprinkling Carts
Reade Mfg. Company

Grass Seed

of Known Quality

TESTED for PURITY and GERMINATION Prices and information on request

Stumpp & Walter G

Specialists in Golf Grass Seeds and Equipment 30-32 Barclay St., New York

Topdress with

to make your greens stand up under punishment during the hot weather. Hyper-Humus tests

86 to 89% Organic Matter

Write for literature and prices

HYPER-HUMUS CO. 48 Park Place Newton, N. J.

O. M. Scott and Sons O. M. Scott and Sons
Storm Sewers, Corrugated Iron
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Street Culverts, Part Circle
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Tee Mowers
Toro Mfg. Company
Pennsylvania Lawn Mower Works
Tractors
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Worm Erndientors
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100,000,000 Cuts a Year!

One greens authority estimates that each Mower Unit of the average fairway gang mower makes a total of about 100,000,-000 cuts a year!

The Mower Units of the PENNSYLVANIA "New" Fairway Quint or Trio are specially designed for this severe Every moving part, service. except the ground roller, is on ball or roller bearings; bearings and gears are in dirt-proof, oil-retaining housings; the wheel-type design permits lighter weight and greater speed; the lubrication is Alemite.

Write for COMPLETE GOLF CATALOG.

Price of "New" Fairway Quint, \$625; Trio, \$375—both at Philadelphia.

> PENNSYLVANIA LAWN MOWER WORKS

> > 1645 North 23rd Street Philadelphia, Pa.

LAWN MOWERS

Will exhibit at Annual Grounds Keepers Convention and Golf Show, Louisville, Ky., February 4 to 7

NATIONALLY KNOWN MANUFAC-TURING AND MERCHANDISING

TURING AND MERCHANDISING
firm has an opening for a high class
greenskeeper or assistant greenskeeper
with out-standing personality to introduce a new specially prepared fertilizer of proven value to golf clubs in the
Chicago area. Prefer a man well acquainted with greenskeepers who possesses selling ability and is willing to
work hard. Excellent opportunity for
the right man and only those possessing
the qualifications outlined need apply.
In answering give full information,
qualifications, selling experience and
salary expected. All letters treated confidentially and will be answered.

Address Box 420, The National Green-

Address Box 420, The National Green-keeper, 405 Caxton Bldg., Cleveland, O.

Seed and Seed Markets

(Concluded from page 13)

are carrying over low germinating chewings fescue of the 1928 crop. Today's market for next spring delivery should cost them around \$35.00 per 100 lbs.

Red fescue from Europe will, of course, come in this year the same as in previous years. By this is meant, it will come in with some sheeps and hard fescue. The price of course of the common commercial European red is much lower than chewings. Good quality European fescue should not cost next spring more than \$28:00 per 100 lbs.

Sheeps and Hard Fescue

All of our sheeps and hard fescue seed comes from Europe and the crop was expected to be extra large. Prices were very low at the opening of the market but since the supply is not as large as first expected, prices have advanced. They are now at a steady level. Good hard and sheeps fescue for spring delivery should cost not more than \$25.00 per 100 lbs.

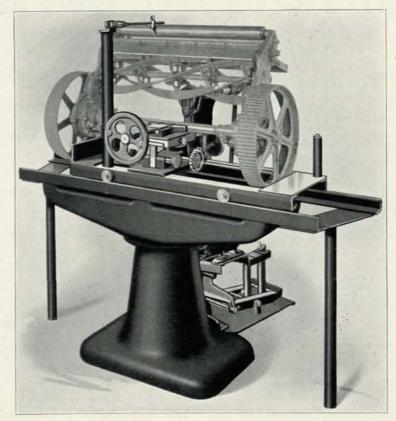
Miscellaneous Grasses

Prices for rough stalk and weed meadow grass will be higher this year as the yield is lower. The yield of rye grasses is practically the same as 1928 and prices therefore are at about the same level.

Milorganite Finds Favor

That Milorganite continues to find increasing favor as a turf fertilizer is indicated by another year of record sales. The Milwaukee Sewerage Commission in a recent letter. reports increased use of Milorganite. Golf courses used 35 per cent more Milorganite this season than last. Its rapid increase in favor is based upon its effectiveness and justifies

New Hardinge Sharpener



The Hardinge Lawn Mower Sharpener that will be shown at the Louisville Show, has many new features and improvements over the original machine shown at Buffalo.

The vise for holding mower has several inches vertical and horizontal adjustment making the handling of any mower very rapid and accurate. The cast base insures perfect stability. The swiveling motor unit gives any angle desired to the cup grinding The motor unit has ample vertical adjustment to reach any blade or reel. Adjustments to a fraction of a thousandth are made possible by the vise adjusting screws.-For full particulars write, Henry H. Doty, 1133 Newport Ave., Chicago.

the sales policy inaugurated by the Commission.

The Sewerage Commission recognized the importance of basing fertilizer applications on soil and turf conditions. They pioneered in advocating systematic programs of turf improvement, and maintain a trained and experienced staff to assist customers in devising economical and effective treatments.

Fairways received most of the Milorganite, altho it was used on greens also as a source of slowly available nitrogen. Clubs are beginning to recognize the folly of attempting fairway improvement by seed alone, and realize that good turf will not maintain itself indefinitely.

Milorganite is being used exten-

sively as a carrier for lead arsenate and concentrated fertilizers. Its excellent mechanical condition facilitates absorption of these substances and the resulting mixture can be distributed uniformly. Besides being a carrier, Milorganite also supplies valuable plant food elements.

A more general appreciation of the benefits to be obtained from liberal fertilization of fairways and greens prior to seeding has resulted in a marked increase in the use of Milorganite on new courses. It supplies nitrogen and does not injure the sensitive young seedlings.

Many clubs have placed carload orders for spring delivery, and all signs point to even greater use of Milorganite on golf courses in 1930.



Our drains can freeze up tight

—but they'll be ready for service with the first Spring thaw!

No worries about frozen drain pipe. What a satisfaction—and what a tribute to sensible selection and shrewd buying!

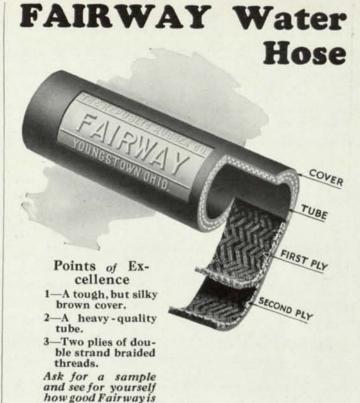
Men who have installed Armco drains know from years of records and from their own experience that Armco Perforated Pipe can and does stand up to the terrific pressures of freezing soil and water.

When thawing weather comes next Spring, Armco drains will be on the job. And for years to come.

For Armco Perforated Pipe is built in corrugated flexible form to resist all strains—of pure iron, to withstand corrosion. And it does just that.

Armco Culvert Manufacturers Association Middletown, Ohio

ARMCO perforated PIPE



TEARS of active competition in all lines of rubber using industries have established for Republic a fine reputation for high quality, endurance and economy. Years of marketing have taught Republic that the Industrial Supply Distributor can best serve both consumer and manufacturer. His intimate knowledge of credit, supply and demand; his warehousing services and his well equipped sales force mean lower distribution costs for us-a saving which returns to you in better quality. Republic distributors can help you solve your rubber problems.

THE REPUBLIC RUBBER CO. Youngstown, Ohio



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