

forest in the nursery gives best germination of tree seeds, may we not also surmise that sowing grass seed in mid-winter should be studied in comparison with the efficiency of spring or fall seeding.

Likewise, the pros and cons of spring vs. fall fertilization of turf have been thrashed out many times, while the effect of applications in the winter has apparently aroused little curiosity. While we should not want to be understood as advocating fertilization of grass during dormancy, an interesting example which has come under our observation seems to be worth recording. The wide-awake pro-greenkeeper of an Iowa golf club near to an old army camp noticed that the manure from the stables had been carried to a place in some nearby woods. At a negligible expense to the club this well rotted manure was hauled to the club grounds during the winter and was applied liberally to all of the tees, which were of Kentucky bluegrass. When the playing season began the slight amount of litter that was left was raked off. The density and deep color of the turf the following season was remarkable. One noticeable effect was that the grass of the tees was green and in active growth, while the adjoining fairways were still brown and lifeless.

Work on Trees in Winter

Trees on the golf course may be pruned during winter or early spring. Pruning aids in controlling insect pests or diseases. Local outbreaks of one or the other are common, but fortunately most of them are not very destructive for more than a few years. Thus a little attention over a short time may save valuable trees on the course.

A typical example of an insect pest which is causing a loss of fine trees on some of the golf courses of the corn belt just now is the two-lined chestnut borer which works just under the bark and injures the layer of the tree from which growth takes place. The leaves drop from the tree in midsummer and soon the tree becomes stag-headed. If the infestation is severe the tree soon dies. The insect is especially deadly to red or black oaks, but causes little damage to the white oak. About the only things which can be done are to fertilize the trees to keep them in vigorous enough growth to repair the injury, and to cut down and burn dying trees. This will prevent the spread of the adults to other nearby trees the fol-

lowing season, and will furnish good firewood for the club fireplace or the heater in the work shed.

Policing the Grounds

There are many things which can be done around the course during the winter. Perhaps there is rubbish to destroy, new sand to haul to traps, etc. There may be places where an additional bridge could be used or where a few steps and a railing on a steep incline would be appreciated by the elderly members. Calendars of operations for various times of the year for florists, gardeners and other horticulturists have been published.

The value of a good heated workshop for indoor work in winter is being realized, and the trend is definitely toward the building of more compost and machinery sheds and more workshop space. Here the machinery can be overhauled in comfort. Ball washers, benches, and all kinds of wooden and metal fixtures about the course can be painted at a temperature which will be high enough to give the best results. The life of flag poles and other fixtures of the greens and tees has been all too short in the past.

In order to keep up with new ideas the greenkeeper should set aside a few days of the winter to attend the convention of the NAGA and also some college short course if possible. He may have time to read some good books on soils and fertilizers, or some of the articles on turf culture in back issues of *GOLFDOM* or other turf publications which he didn't have time to read during the summer.

Undoubtedly the greenkeeping profession carries with it some degree of seasonal employment. It has been our humble effort to show that it need not be so, if greenkeepers sell the idea that their services are valuable in the winter as well as in the summer. Perhaps nothing will do it as well as a goodly number of actual demonstrations.

"CUREX," NEW TURF PREPARATION, BEING INTRODUCED

New York City.—A new brown-patch preventive and turf disinfectant, to be marketed under the trade name "Curex," is being introduced by W-G Chemical Co., 500 Fifth Ave. G. G. Wittwer of that organization writes: "Dr. E. D. Wilson and I have been working with turf disinfectants for a long time, know the game, and in 'Curex' we have a really unusual and outstanding product." The company will gladly supply literature on request.

Not only BETTER COMPOST but:

- compost in which all the raw materials have been used—no waste!
- compost made from lumps or sod, wet or dry—no delays!
- compost mixed and delivered in the finest, uniform grade—as fast as two men can feed the hopper!

That's why ROYERS ARE SAVING 70% to 90%

Made in four models

SEE THE ROYER AT THE CONVENTION

A Model "M" ROYER will be on display in the booth of Golf Equipment, Inc., during the National Greenkeepers' Convention, William Penn Hotel, Pittsburgh, Jan. 30th-Feb. 2nd.

See it! . . . You'll get a good idea what the ROYER will do.

SOLD THRU LEADING GOLF
EQUIPMENT DEALERS

ROYER
FOUNDRY & MACHINE CO.
158 Pringle Street (Kingston Station)
WILKES-BARRE, PA.

ST. MUNGO'S FORMER PRESIDENT DIES IN ENGLAND

Alexander C. Wood, former president of St. Mungo Mfg. Co., of America, and a former partner of the St. Mungo Mfg. Co. of Glasgow, died Oct. 11 in England, to which country he returned after retiring from the St. Mungo Mfg. Co. of America presidency in 1931. He was well known and liked by many American friends and business associates who will mourn his loss.

VANDERBECKEN TO ANNOUNCE NEW GOLF SUPPLY CONNECTION

Robert Vanderbecken, former sec. of Worthington Mower Co., is planning an interesting new connection in the golf course supply field that will retain in this line of work a widely known and able operator.

Vanderbecken formerly was with Carter's Tested Seeds in England, Canada and the United States, and also was active in golf course architectural and construction work, prior to joining the Worthington forces in opening their business in Canada. He also was active in establishing the Worthington business in England and other export territories.

McCLAIN ADDS "KOOLDRINK," NEW COURSE SPECIALTY

Canton, Ohio.—The McClain Brothers Co. line of putting green specialties will be continued in 1934 as heretofore. "Fungol" for the control of brown-patch and the eradication of soil vermin is their headliner. Also important is the McClain all-chemical and wholly soluble putting green fertilizer, "Veg-e-tonic," which the makers claim has unusual value for green fertilization, with high rating of nitrogen, phosphoric acid and potash, and containing no useless fillers.

Along with "Fungol" and "Veg-e-tonic" the McClain line includes the "Hydro-Mixer," an inexpensive piece of equipment which makes it possible to completely treat or fertilize an entire green in 10 to 15 minutes; the McClain underground hose locker, an all steel, permanent receptacle for the hose and sprinkler at every green; and the new "Kooldrink" outfit for supplying cold drinking water from present water system at any part of the course, without the use of ice, electricity, chemicals, machinery or other expense. The makers expect this novel and interesting piece of golf course equipment will prove attractive to those clubs, supplying players with cold drinking water during the warm summer days.

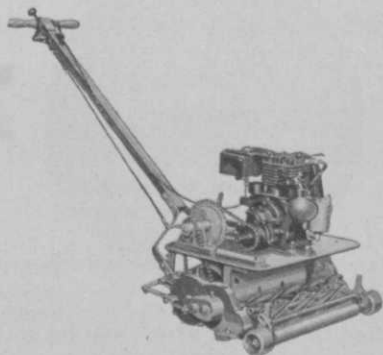
Literature on any of these items may be had by writing McClain Brothers Company, Canton, Ohio.

CHANGE NEW YORK OUTLET FOR WORTHINGTON MOWERS

Stroudsburg, Pa.—Worthington Mower Co., through its president, J. B. Hurlock, announces the closing of its New York offices and the appointment of the Arthur D. Peterson Co. and George Malvese & Co., New Hyde Park, L. I., as exclusive distributors for the Worthington line in the New York district.

"GREENSKEEPER" IS LATEST IN MOTO-MOWER LINE

Detroit, Mich.—After two year's experimental work, the Moto-Mower Co., 4600 Woodward Ave., is introducing its new "Greenskeeper" model putting green mower. Weight of machine has been held to 165 lbs., without sacrifice of sturdy construction or necessary features for satisfac-



tory operation. Moreover, according to the makers, weight has been distributed so that ground pressure on greens is no greater than that of a golfer's foot.

Among the specifications are: double gear drive, oil tight housing; throw-out clutch disengages reel for transport; cutting unit, 8 crucible steel blades; $\frac{1}{4}$ to $\frac{3}{4}$ in. cutting height; forward catch grass-box; motor air cooled, built-in reduction speed gears, oil splash lubrication, Tillotson carburetor and air-cleaner.

For a full description of the "Greenskeeper," write the manufacturers for their recently issued folder.

PENNSYLVANIA TO PUSH WIDER FAIRWAY UNIT

Primos, Pa.—Pennsylvania Lawn Mower works plans no changes in its putting green mower for 1934, believing the few refinements added last season, including the high-speed 8-blade cylinder, to be all needed to produce smooth, ridgeless greens

IN THE BAG FOR 1934



While you are making up the maintenance budget for 1934, set aside some money for brown patch prevention with Semesan or Nu-Green.

When the weather is against you these Du Bay fungicides keep greens healthy and unscarred at remarkably low cost! Semesan, with its ten-year history of successful control, is recommended for normally fertile turf. Du Bay Nu-Green is equally effective, but it is advised where fertility is lower.

Write your seedsman or supply house now for free turf disease pamphlet, or send direct to Bayer-Semesan Co., Inc.

NEW LOW PRICES

Semesan

25 lbs. . . .	\$ 46.25
100 lbs. . . .	180.00
200 lbs. . . .	525.00

Nu-Green

25 lbs. . . .	\$ 30.00
100 lbs. . . .	115.00
300 lbs. . . .	330.00



BAYER-SEMESAN COMPANY, INC., DEPT. A-1
Du Pont Bldg. Wilmington, Del.

without blade marks. For lightness and ease of pushing, aluminum alloy castings are now standard for the Aristocrat, a side-wheel mower suitable for greens, and Pennsylvania's tee-mower.

Because the price per width of cut is less and scalping is no greater, P.L.M.Wks. plans to emphasize and recommend its 36 in. fairway unit this season, rather than the 30 in. unit. Results obtained with the wider model last season were very satisfactory, according to N. D. Perine, vice-pres. of the organization.

Innovations in the Pennsylvania line in-

clude scrapers for ground rollers, and a detachable crab-grass rake to act in front of the blades.

With respect to prices, Perine reports: "Prices on all equipment will be the same as last year and we hope to continue them throughout the season, although we have taken the caution to note on our price sheets that they are subject to change without notice."

WORTHINGTON BALL TO PUSH "SWEET SHOT" IN '34.

Elyria, Ohio.—Worthington Ball Co. has developed for the 1934 pro trade a new thin-cover ball to retail for 75c, and claimed to possess all the improved features in the way of click, distance and accuracy that golfers demand. The ball will



be called the "Sweet Shot," will be obtainable by players only through pro-shops, and will be backed up with a generous advertising campaign.

The "Tommy Armour" ball, extensively sold during 1933, has been redesigned to incorporate all the latest developments in ball construction and will again lead the Worthington line as its 50c representative.

F. & N. ADDS 7-GANG "FLEET" TO 1934 LINE

Richmond, Ind.—For 1934, F. & N. Lawn Mower Co. is adding a 7-gang outfit, designed to cut a 16-foot swath, to its former 5- and 3-gang models, these latter cutting 12 and 7 ft. respectively. Another innovation will be an attachment, of special construction and sold only on request, which will lift the two outside mowers on the 5-gang outfit so it can be taken over narrow bridges, etc.

To assist in efficient maintenance, all F. & N. mowers will hereafter have demountable reels and cutter bars, so that these parts can be removed without tearing down the frame.

F. & N. will continue to back up its

LEWIS GOLF BALL WASHER

("Standard thruout the World")

As necessary as the "tee itself"—Lewis Washers are durable, economical and priced for even the smallest club. See your golf equipment dealer now—and specify LEWIS WASHERS.

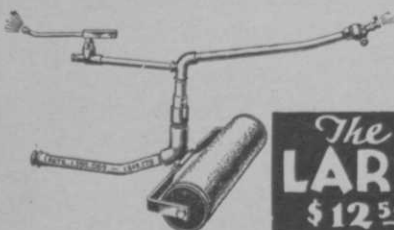
Lewis Washers in lots of 1 to 10.....\$6.00
—in lots of 11 to 20.....\$5.50
Complete tee ensemble—washer, tee stake, towel, waste container, tee data plate
Lewis Bag Rack and other equipment....

ORDER NOW.

G. B. LEWIS COMPANY Showing Portion
Dept. GD 134 Watertown, Wis. of Tee Ensemble



SPRINKLES 100 foot CIRCLE



- Spreads water evenly at any pressure.
- Speed of rotation controlled easily by thumb-screw on nozzle.
- Meet the LARK at the Pittsburgh Convention.

L. R. NELSON MFG. CO.

1726 S. WASHINGTON

PEORIA, ILLINOIS

products with its regular guarantee to replace free of charge any part of the mower unit that breaks during service and to refund purchase price if purchaser is not satisfied of the mower's efficiency after a fair trial.

Greenkeepers and green-chairmen are invited to write for literature describing the F. & N. line in detail.

U. S. RUBBER CO. TO MAKE LINE OF PGA BALLS

Providence, R. I.—United States Rubber Co. announces two new golf balls for sale only to members of the Professional Golfers' Association of America. Both the U. S.-PGA *Championship*, a distance ball for the better golfer, and the U. S.-PGA *Tough* for the good player who wants a tough ball with plenty of distance, will retail for 75c each, and will be made in recess marking only.

The two brands will be ready for delivery to PGA members January 25.

WORTHINGTON IMPROVES MODELS FOR 1934

Stroudsburg, Pa.—Worthington Mower Co.'s "Overgreen" will be equipped in 1934 with a special brush, mounted in the front of the machine and designed to be used at the same time the greens are cut. It will have an over-all swath of 45 inches and pressure on the green surface will be regulated by a spring.

Putting green units of the "Overgreen" may be disconnected and in a few seconds, tee mowers, approach mowers, spikers, rollers, discers and rakes attached. This makes it possible to keep the machine actively employed and has led the manufacturers to guarantee that there is no eighteen hole course that cannot pay for this machine in one season's time out of savings alone.

A new style front roller has been perfected which combines in one both roller and casters with all the advantages and none of the disadvantages of either. This has been done by enlarging the ends of the front roller $\frac{1}{4}$ in. in diameter. These enlarged ends will have all the advantages of the caster wheels' non-rolling feature, but if they sink too deeply into the surface of the ground, the center part takes up the weight and prevents scalping.

The Worthington Lawn Tractor, for 1934 will embody latest improvements of the Ford Motor Co. The 1934 motor is used and Ford's latest straddle mounted truck type differential. This gives a 40% increase in strength over last year; Worthington warrants the transmission of their tractor unconditionally. Pneumatic tires, 9x13, tried during 1933, have met with such success that they will be recommended



WHEEL SPUDS

Quickest to put on and take off. Doubles traction. Durable and low priced.

All sizes for all purposes. Samples and circulars sent free on request. Advise make of tractor and purpose intended.

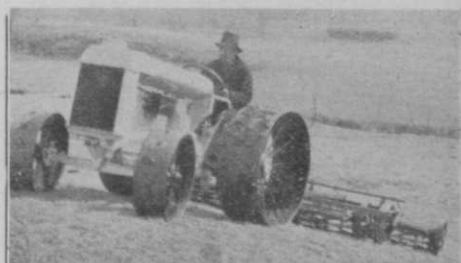
If your Ford or equipment dealer cannot supply, write direct.

Immediate shipment. Prices reduced.

Golf wheels and all Fordson parts on hand.

R. S. Horner, Geneva, O.

GOLF WHEELS for FORDSONS



The R. H. Golf Wheels are stronger, rims do not bend, 50% better traction, easier steering, and rounded edges.

Many clubs are replacing old wheels with these stronger and better wheels.

Sold in singles, pairs or full sets. Immediate shipment. If your Ford or equipment dealer cannot supply, write direct.

R. S. HORNER (Mfrs.) Geneva, O.

OREGON SEALED

BENT Grass Seed

Contract Growers and Distributors

RADWAY McCULLOUGH SEEDS

115 Broad St.

New York, N. Y.

JOHN C. DEE

Greetings to my old golf friends!

When you need Tires, Heaters or Batteries, remember . . . C. Dee.

WM. J. CASSIDY TIRE & AUTO SUPPLY CO.

1227 W. Roosevelt Rd.

Chicago, Ill.

For Best Results

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McCullough's Seeds

Specialists in all

GRASSES and BENTS

THE J. M. McCULLOUGH'S SONS CO.

330 E. Front St.

Cincinnati, O.

Southern Golf Clubs

Cut Your Maintenance Costs
and Improve Your Course

A complete course inspection service with the specific object of pointing out cost-cutting maintenance practices... suggesting such changes as will make for improved course design, condition, economical upkeep.

This service is based on more than 30 years' experience in building and maintaining several of the finest courses in the South and North.

The nominal fee invariably has proved to be but a small portion of the amount I have been able to save clubs.

For further details address:

JACK DARAY

White Pines Golf Club, Bensonville, Ill.

SUCCESSOR TO GOLF BAGS

TO GOLF BAGS

GOLF PAX

Another BIG year ahead for pros handling Golf Pax—the revolutionary new-type golf bag. Ask the Tufhorse salesman to show you its amazing sales features.

Des Moines Glove & Mfg. Co.

Des Moines, Iowa

SUCCESSOR TO

GOLF BAGS—SUCCESSOR

DIAMOND TRACTOR SPUD



Hard steel center keeps spud sharp—softer outer steel wears away faster. Will not harm turf—made of drop forged steel, can't break or chip.

Diamond Calk Horseshoe Co.
4702 Grand Ave., Duluth, Minn.

in practically all service for the coming year. These tires eliminate shock and jar to the tractor itself and add very greatly to the comfort of the operator.

The standard Fairway unit has been changed in several respects in keeping pace with the increased speed and service which these depression times have put upon all machines of this class. The rear roller has been placed forward 1½ in. from its former position and a tie-rod is installed between the two housings in the rear of this roller. Knives of this machine are lifted by means of this rod when going from one fairway to another, and all possible strain from bed knife backing is thereby removed. The main axle has been increased in diameter and flanges at either end strengthened in proportion. The rear roller is equipped with hardened steel pins fitted in special bronze bushings and equipped with alemite lubrication fittings.

GAIROARD NAMED CODE ADVISOR FOR SPORTS GOODS INDUSTRY

C. L. Gairoard, president of The Kroydon Co., Maplewood, N. J., has been selected by the sporting goods industry as its industrial advisor to the government under the code. Gairoard has been active in the Athletic Goods Manufacturers' Assn, and as chairman of the Cutlery and the Tool Manufacturers' associations had much to do with drafting the codes for those groups.

He has his hands full with business interests, being active as president of Kraeuter & Co., Inc., tool manufacturers; president of Kraeuter Drop Forge Co., and since 1898, sales manager of J. Wiss & Sons Co., cutlery makers, in addition to his association with Kroydon.

MACGREGOR TO INTRODUCE NEW "SUPER-VALUE" GOLF CLUBS

Dayton, Ohio—Crawford, McGregor & Canby Co. will introduce in 1934 five new lines of popular priced woods and irons to sell at \$6 and \$5 respectively.

"Never before," says Ed. Canby II, of the MacGregor organization, "has it been possible for us to build so many features into clubs selling at anywhere near these figures. This means that golfers who are compelled to limit their expenditures for equipment can now get clubs they'll be proud to own."

According to Mr. Canby, both woods and irons will be equipped with the MacGregor "Neutralizer" that takes sting and vibration out of steel shafted clubs and gives them the "feel" of hickory. Irons will carry a selection of back designs—a flat back model, a flange sole model, and a back-weight-balanced model. Special face woods with patented "Scrucloc" inserts will be

available at \$6. Most of the models have True Temper shafts.

Dealers, pros and golfers who have seen these new lines are enthusiastic about them, according to the scores of letters that have been received at MacGregor headquarters in Dayton.

Enthusiasm at the factory over the new "Tru-Whip" woods and irons are being borne out by the pros and players who have tried these new clubs. MacGregor claims greater distance and accuracy for these clubs and points out the three features responsible to be (1) shafts graduated in amount of whip, short pitch clubs being the stiffest; (2) the "control sleeve" which fits over the shaft and under the grip, and is claimed to remove the usual whippy-shaft club "wobble" and put leverage where it belongs, and (3) the patented MacGregor "neutralizer," a section of hickory inside the shaft where it joins the club-head, intended to absorb shock and sting and make the club evenly flexible from grip to head.

TORO ADDS REFINEMENTS AND NEW MODELS

Minneapolis, Minn.—A number of worthwhile improvements and additions to the Toro Manufacturing Co. line of golf course maintenance machinery have been made for 1934, according to word received from K. E. Goit, Toro sales manager.

Chief among the new improvements are changes on the hand putting-green mower. A new, easily accessible finger tip adjusting gauge regulates the height of cut without the need of wrenches. With this gauge, the mower can be adjusted properly without a straight edge and on uneven ground. New automatic self-takeup ball bearings greatly increase the life of the reel bearings and provide positive alignment of the reel shaft. The bed knife bar and the roller drum spiders, formerly built of cast iron, are now constructed of special aluminum alloy, at no sacrifice in tensile strength. Greater use of aluminum reduces the gross weight of the mower over 5 pounds.

The Master tractors and fairway mowing outfits have been improved with a new, simplified steering gear, providing easy steering. Several structural changes have been made in the frame to increase flexibility, an important feature for hilly courses.

Two brand new mowers are offered: the "Parkway," a 2-wheeled rubber-tired sickle-bar mower for cutting rough, and the "Parkmaster," a 3-wheeled rubber-tired mower for high speed tee and approach cutting.

The company reports an increased volume of spring orders on file and are looking forward to greatly improved business for 1934.

Grass Seed of Known Quality

TESTED for PURITY and GERMINATION

Stumpp & Walter Co.

Specialists in Golf Grass Seeds, Fertilizers and Equipment

132-138 Church St., New York

That Happy Combination of Quality
and Economy is offered in our

New Broadmoor One-Color Score Card

Produced by a New Process, its price is \$21 for 5,000. The card, fully complete and comprehensive, is not small and the stock is heavy.

Samples to clubs on request.

JOHN H. VESTAL CO., PRINTERS
703 South La Salle Street - Chicago

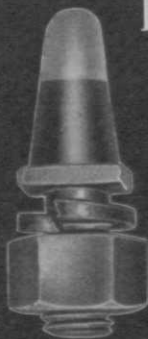
CUREX

THE BEST, SAFEST AND MOST
ECONOMICAL
TURF DISINFECTANT

YOUR SUPPLIER HAS CUREX OR CAN
GET IT FOR YOU.

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W-B CHEMICAL COMPANY
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PHOENIX RED TIP TRACTOR SPUDS

Extra Long Service

Made of a special analysis steel, hardened by the latest scientific heat treating methods. Sizes from $\frac{3}{8}$ in. to $\frac{3}{4}$ in. Also Mower Spuds. Inquiries invited.

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