

and Pinnacle - those are the balls that have kept Pro Shop cash registers ringing all last season (1939) with the merriest 12 months' jingle-song ever.

Almost fifty percent ahead! Fifty percent gain on last year's (1938) record-breaking popularity and sales-and every

sale and every cent of retail profit a Pro Shop sale and a

Advance orders for spring promise another exciting increase for 1940! We're not prophets, folks, we're not gamblers and we don't suggest that you be-but from where we're sitting, we suggest Acushnets - the golf balls that protect you from all competition - as the best for your money and your profit.



GOLF BALLS

Sold only through Pro Sho

More and More Golf Courses Are Standardizing On These

2 Proved Pennsylvanias

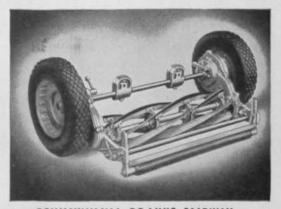
TEAR after year, more and more of the country's leading golf courses turn to Pennsylvania mowers as standard equipment. They know that these famous machines take the gamble out of the purchase of mowing equipment, because they are PROVED in every detail and incorporate every worth-while feature for efficient and economical operation. This year, more than ever before, these two Pennsylvanias are the greatest dollar-fordollar value in golf course mowers.

DE LUXE FAIRWAY - 30 and 36 inch sizes. Unbreakable malleable iron construction. 6 heavy crucible analysis steel blades. Timken roller bearings on cylinder, ADJUSTABLE to take up wear. Raised edge lower blade—REVERSIBLE. Train of machine cut hardened gears on BOTH sides, protected by dust-proofed greaseretaining cases. Steel roller with improved dust-proof hardened steel bearings. Pneumatic tires optional. Available singly or in gangs of 3, 5 or 7.

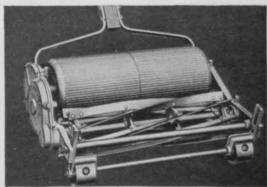
The 30 inch MODEL K FAIRWAY is similar in all important details to the De Luxe except it is made of CAST iron, therefore offered at a lower price.

SUPER-ROLLER GREENSMOWER-Ballbearing, high-speed 8-blade cylinder insures a smooth, ribless cut, so essential for a perfect putting surface. Train of 3 cut gears, running in grease, insures an easy-pushing, fast-cutting mower. Castor wheels mounted on hardened steel bushings with alemite lubrication. Light weight aluminum rollers are interchangeable, right or left.

Send for Our Latest Catalog

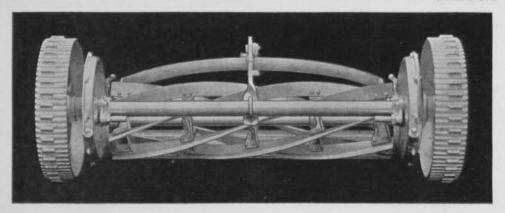


PENNSYLVANIA DE LUXE FAIRWAY



PENNSYLVANIA SUPER-ROLLER GREENSMOWER

Every Trivital 1



NO CORRUGATED FAIRWAYS with the NEW 1940 SUPER MOWER!

We had two objectives in mind when we designed the 1940 Super Mower. One was the elimination of the current bugaboo of corrugated fairways. . . . The New Super Mower has only 14-inch drive wheels, but with a 3-inch tread it clings to the ground like a leech.

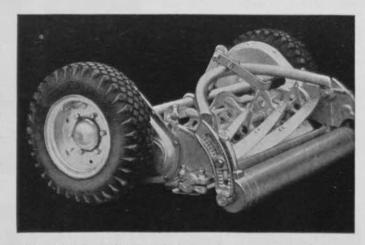
The next objective was to build a mower that could be disassembled quickly by any ordinary workman. . . . The New Super Mower can be taken down in just about half the time required for the older models.

You will want to know more about this mower. Send for our 32-page catalog today.

Pneumatic Wheels. High Cutting Range.

You can put Pneumatic wheels on the New Super if you want them. They are no good for Golf Courses, but they are fine for Parks and Institutions.

The rear roller can be adjusted so the bed knife is $2\frac{1}{2}$ inches off the ground. Great for rough cutting.



TORO MANUFACTURING CORPORATION . MINNEAPOLIS, MINN.

SPRING MOUNTED - DOUBLE SUPER-LOW POWER



THERE ARE MANY NEW IMPROVEMENTS IN THE 1940 BULLET

Aided by one of the best tractor engineers in the country, we have been busier than beavers, refining and improving the Bullet Tractor.

You asked for a spring-mounted front end—the new Bullet has it.

You asked for more power. The 1940 Bullet has double super-low power and speed range.

You asked for a power take-off on the back end where it belongs. You're getting it.

You asked for a comfortable seat. Try this one—we believe you'll like it.

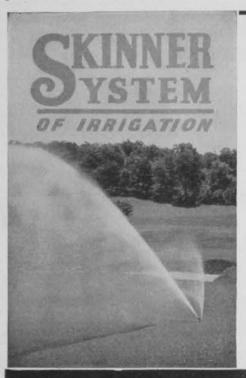
All of these—plus a 65-inch wheelbase, a turning radius of $4\frac{3}{4}$ feet and a smart looking job from start to finish.

Get full details—our new 32-page catalog is ready.

TORO MANUFACTURING CORPORATION MINNEAPOLIS, MINN.

Established 1914

65 INCH WHEELBASE - RADIUS 43/4 FEET



You're Invited

. . . TO SEE THE COMPLETE SKINNER SYSTEM LINE OF GOLF COURSE SPRINKLERS.

BOOTH No. 1 GREENKEEPERS' CONVENTION

February 6 to 8

If you can't attend, do the next best thing and write us today for catalog and complete details. No obligation.

THE SKINNER IRRIGATION CO.
415 Canal St. Troy, Ohio

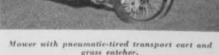


NEW and IMPROVED IDEAL Greensmower



WITH LIGHTER WEIGHT - GREATER POWER

• You can do a better job of maintaining your putting greens with this new and improved putting greens mower for 1940. It's lighter in weight-and a new, higher speed engine develops full 1 h.p., giving you plenty of power.



grass catcher

You get cleaner and better cutting, too-the front caster and roller assembly are mounted on one shaft within the cutting width of the reel. The clutch is of the simplest design, no parts requiring adjustment. Greater strength is added to the mower by the malleable

The reel blades and bottom knives last longer, retain cutting edges longer and require less adjustment by the operator. This is due to a new heat-treating formula, developed after years of engineering and experimental work. The steel is harder and tougher, assuring better service.

Write for a complete catalog. Also get the facts about the fairway mowing economies made possible by the 3, 5, 7 or 9 gang Ideal "Bulldog" gang mower. There is no obligation.

DEAL POWER LAWN MOWER CO.

446 Kalamazoo Street, Lansing, Michigan

New York Branch: 12 HARRISON STREET New Rochelle, N. Y.

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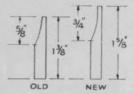
Worthington Cutting Units for 1940 — operating and maintenance efficiency

Each year since 1914 Worthington engineering research and practical operating experience have been the bases of continuous alterations and improvements to meet changing mowing conditions and the demands of our customers for the very latest and most acceptable machine in its field. There are 26 years of this policy of leadership in the new 1940 Worthington Cutting Unit. As always, it is today, the most modern and up-to-date cutting unit available.

Here are the outstanding features of the 1940 Worthington Cutting Unit:

1 Your choice of two designs of fly knife reels—the conventional spiral type or the patented "V" or herringbone type.

2 The fly knife steel used by Worthington is a wider section than ever, allowing for greater wear, and greatly lengthening the life of the reel.



3 This new knife section is a special heat-treated, oil-tempered alloy steel with a minimum Rockwell hardness of 40-C.

4 The largest diameter section of cold rolled steel ever used as a fly knife shaft is part of the construction of this 1940 unit.

5 The fly knife blades are firmly joined and supported to the fly knife shaft with 6 steel discs instead of 5 discs or spiders.

6 The unit has a separate train of machine cut gears for each ground wheel running in oil bath on both sides. This has been standard on all Worthington Cutting Units since 1914 and has proved itself by 26 years of actual use.

7 The fly knife reel and the bed knife backing and steel can be removed for grinding in 9 minutes' time. Complete dismantling time for the entire unit requires but 11 minutes. This has been a time saver for Worthington owners since 1914.

Notice the sturdy, demountable rims on the ground wheels with double row of auxiliary corrugations to give deeper penetration and better traction on Bermuda turf and in other heavy mowing services. Acclaimed the best wheel rim tread of any mower since its introduction 4 years ago. Note, too, that these rims, when worn out or if broken by accident, can be removed and replaced in a few moments, at less than ½ the cost of a whole new wheel. Rubber pneumatic tires are interchangeable and optional equipment for those who prefer them.

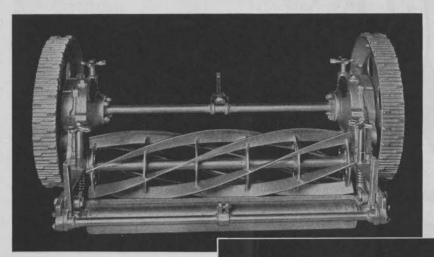
9 The single hand adjustment for regulation of the bed knife steel is an exclusive Worthington feature and the quickest adjustment of any cutting unit on the market. It automatically locks in any position—no tools required.

10 Worthington Cutting Units are lubricated on automotive principles. When gear housings have been filled to proper level they need only be checked once during the season. There are no other places to grease or oil on the cutting units or frame.

Worthington Mower Company

FEBRUARY, 1940 7

improved to give you the maximum of at a minimum of labor, time and cost.



Spiral-type reel

V-type reel

From the greenkeepers' and operators' viewpoints, there is less fussing and trouble with Worthington Cutting Units and Gang Mowers. The general design is simplicity itself, its construction strong and sturdy to give years of service, and a beautiful cut under all conditions with a cutting range up to 4 inches. Its ground weight is 223 pounds.

Investigate the Worthington 1940 Cutting Unit before your mowing problem becomes acute this spring, or write us today for complete data and specifications.



ARE YOU REALLY GETTING BY WITH MAKESHIFTS ?

- Does the extra time you spend keeping outmoded equipment in service save you money?
- Your Buckner representative is trained to show you how to get the most out of sprinkling equipment. It will be worth your while to call him in for expert advice and consultation.
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FRESNO, CALIFORNIA

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For Economical Maintenance of Fairway, Green and Lawn



For best results, Spike-Discs should be used before reseeding, fertilizing and top dressing. By light sprinkling after use, the seed and fertilizer are settled into the perforations and not washed away by flooding rains or high winds.

Cultivation and aeration of lawns, greens and fairways in one simple operation? Yes, thoroughly and at low cost, too, when you use SPIKE-DISC. For SPIKE-DISC is

as easy to operate as your lawn-mower. Its knife-like blades do not leave ugly holes as do old style implements with

square or round spikes, but cut unnoticeable slots to the root areas.

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Also Dunham Water-Weight Lawn Rollers

"Light as a Feather"

in comparison to other power greens mowers, say experienced greens keepers all over the country. The Cooper Champion is the world's lightest weight power greens mower! Light in weight, outstanding in durability, foremost in economy—the Cooper Champion is tops in performance!

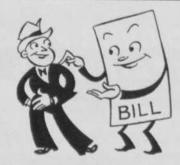
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One way to stay within your budget is to use those products offering the most protection at the lowest cost. Avoid extra maintenance expenses.

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and FUNGCHEX
for Better Control of Brown Patch

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WOOD-RIDGE MFG. DIVISION OF F. W. BERK & COMPANY, INC.

WOOD RIDGE

NEW JERSEY

TIMELY TURF TIPS

MAGNESIUM and ACID SOIL

At times magnesium deficiency limits turf growth. It has been encountered in the Pacific Northwest, and also along the Atlantic Seaboard, notably in parts of New England, New York, New Jersey, and even farther south.

As a rule, soil content of available magnesium, and calcium also, is lower in acid than in non-acid soil. Hence magnesium deficiency is generally confined to acid soil.

Accepted practice is to express soil reaction in terms of pH. By this method the figure 7 represents a neutral soil, lower figures denote increasing acidity and higher ones increasing alkalinity. The critical pH for most turf grasses falls in the range of pH 5.0 to 6.0. Besides testing for soil reaction, available magnesium should be determined also, especially on more acid samples from the localities enumerated above. When magnesium is low (500 pounds or less per acre by the Truog Method), a finely ground dolomitic limestone should be used to correct excessive acidity. Dolomite contains both calcium and magnesium carbonate and hence performs a dual function. It corrects acidity and eliminates mag-nesium deficiency. This is cheaper than buying non-magnesium limestone to correct acidity, and magnesium sulfate to provide needed magnesium. A dolomite containing not less than 15 to 20 percent magnesium, not less than 15 to 20 percent magnesium, reported as magnesium oxide (or its equivalent) should be used. If not printed on the outside of bag, this information can be obtained from producer. Otherwise, source of nearest dolomite can be procured from Agricultural Department, National Lime Association, Washington, D.C.

Although rare, magnesium deficiency may occur where lime is not needed to correct acidity. Then magnesium sulfate, commonly called epsom salts, should be used. On greens from 1 to 2 pounds per 1000 square feet suffice, and on fairways not more than 100 pounds per acre are needed. Dolomite is of doubtful value as a source of immediately available magnesium when soil reaction is above pH 6.0.

Tell us about your Turf Problems. Write to:

Turf Service Bureau

THE SEWERAGE COMMISSION
Milwaukee Wisconsin

MILORGANITE for BETTER TURF



A Post Card Will Bring Complete Information Without Obligation . . .

Every Greens Committee will welcome the good news the Peerless Mower Sharpener brings—that all cutting units are in perfect condition—that this year your Fairways will be the envy of Clubs for miles around. The PEERLESS sharpens all makes of power mowers and tractor units in half the time taken by ordinary methods. Attach to light socket. Simple to operate as A B C. Get the facts today. Send postal to...

THE FATE-ROOT-HEATH CO.

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PLYMOUTH, OHIO



MANUFACTURERS OF THE Silver King GOLF COURSE TRACTOR

DON'T FORGET TO GRUB-PROOF YOUR GREENS AND FAIRWAYS

Unsightly damage by grubs and worms can easily destroy the time and money spent in developing fine turf.

Protect your investment by grub-proofing greens, fairways, lawns and tees with NuREXFORM or GRASSELLI Lead Arsenate. These Du Pont chemicals are effective and easy to apply.

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