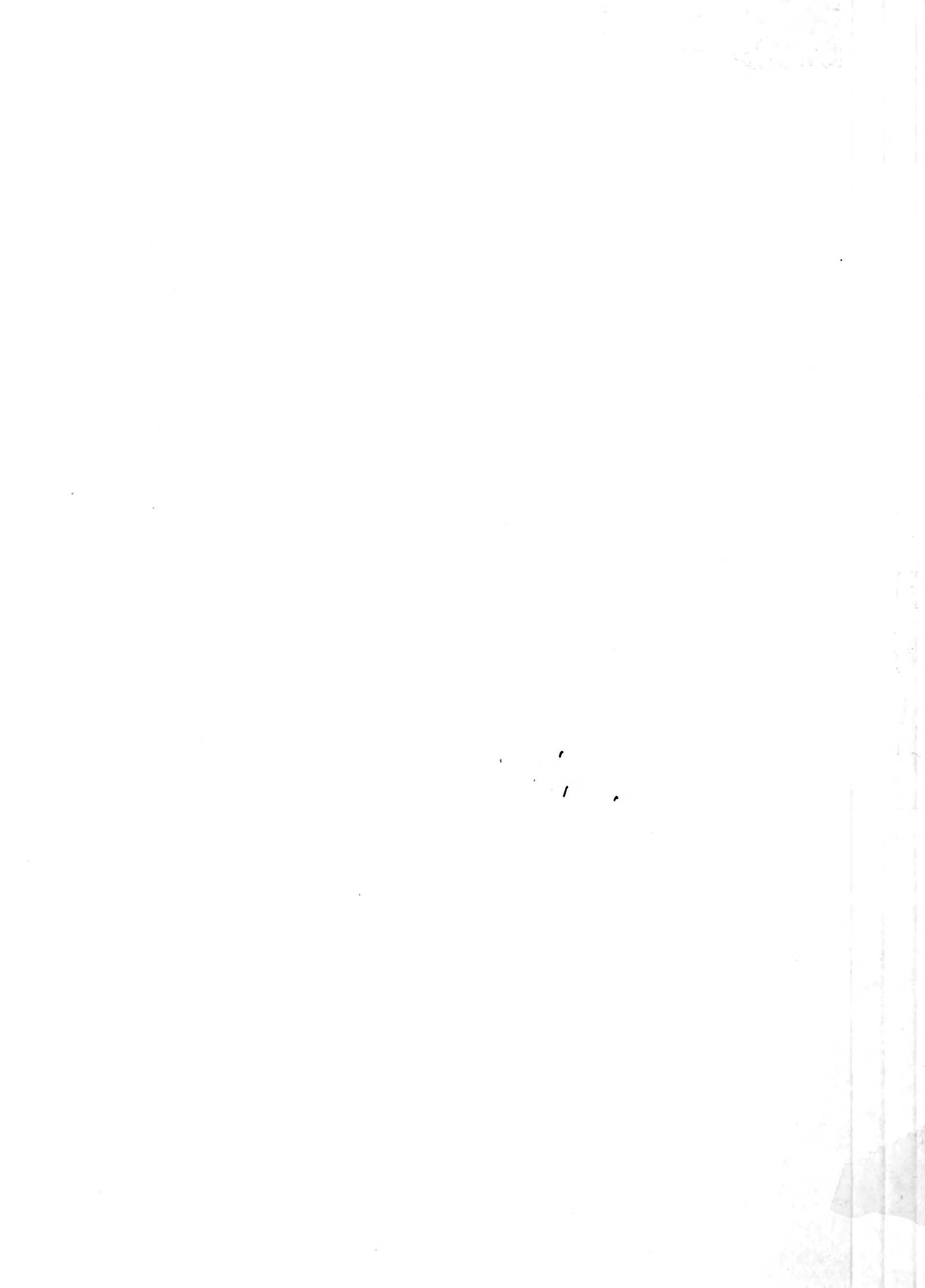


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



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U. S. Department of Agriculture.

61037

# MICHELL'S GOLF CLUB SUPPLIES

518 MARKET ST.  
PHILA.

# MICHELL'S RELIABLE GRASS SEEDS

## SEPARATE VARIETIES

All Strictly Recleaned and Carefully Tested for Purity and Germination.

Careful selection of seed is one of the most important considerations in golf-course maintenance, and since this item represents but a small percentage of the total cost of turf building, it is essential that only seed of *proved quality* be used. A bad start can set all initial preparations and subsequent labor at naught.

We call your attention to our fifty years of experience with turf grasses on the finest golf courses, parks and estates in the East. Large volume places us in a position to offer highest quality seed of the latest crop, direct from the most reliable sources, both in this country and abroad. Thorough recleaning by modern methods eliminates to the greatest degree weed seeds and chaff. We carry complete stocks of the varieties listed below, and can give prompt attention to your order.

On account of the fluctuations of the market, the prices on separate varieties of Grass Seeds are subject to change. We endeavor at all times to maintain our prices as low as possible, consistent with quality. Please send us your inquiries and orders for Grass Seeds in separate varieties, stating quantities and we will give them our best attention and quote lowest current prices.

### BENT GRASSES

Approximate rate of seeding—10 lbs. per 1000 sq. ft.

**Seaside Bent** (*Agrostis maritima, a. stolonifera*). This is the ideal grass for putting greens, a strain of true *creeping* bent produced in Oregon under rigid supervision, *certified* and *sealed* in 50 and 100 lb. bags, by the State of Oregon. Quick-growing, deep green in color, and spreading rapidly by means of stolons it will produce a perfect green in one season. Requires much less top-dressing than vegetatively propagated strains of creeping bent and has less tendency to "grain". Injuries heal quickly. Seaside Bent is resistant to large brown patch and is winter-hardy. Thrives best in moist, well-drained soil. Approximately 4 million seeds per pound.

**Colonial Bent** (*A. tenuis*). Spreads slowly by short, creeping stems and produces an extremely fine dark green turf. Has a wide climatic range and is tolerant of excess moisture and drought. Valuable for greens, and in mixture for fairways, lawns and similar turf. We offer highest quality seed of the several strains of Colonial Bent. Approximately 5 million seeds per pound.

**Brown Top.** Grown in New Zealand. Extremely fine seed.

**Rhode Island Bent.** Domestic Seed. Relatively scarce supply.

**Astoria Bent.** Produced in Oregon under same rigid supervision as Seaside Bent.

**Velvet Bent** (*A. canina*). Produces a fine silky turf of medium green color. Grows well in both shaded and open locations. Has a slight spreading habit by means of short stolons. Pure seed of this strain is exceedingly scarce and necessarily commands a high price. Approximately 10 million seeds per pound.

**German Bent.** A natural mixture of colonial, velvet and creeping bent types valuable for fine turf of all sorts. Sown alone, the resultant turf is apt to show variations in color because of this fact, but under proper care German Bent will produce sod of the finest texture. Most shade-tolerant of the bent grasses. Approximately 4 million seeds per pound.

**Red Top** (*Agrostis alba*). A quick-growing, relatively coarse type of bent. Will not stand extremely close mowing but will last for several years under average lawn or fairway conditions. Tolerant of adverse soil conditions. Recommended as a nurse or temporary grass in green or fairway mixtures. Approximately 4 million seeds per pound.

### BENT STOLONS

We can furnish stolons of several desirable strains of creeping bent, on short notice. Prices will be quoted on request.

### BLUE GRASSES

Approximate rate of seeding—100 lbs. per acre.

**Kentucky Blue Grass** (*Poa pratensis*). The most satisfactory permanent turf grass for use in northern states, improving year after year under proper care. Deep green in color, with narrow leaf blades, it spreads rapidly once established and forms a fine-textured sod when cut at lawn or fairway length. Best results are obtained if sown in conjunction with other grasses.

**Canada Blue Grass** (*Poa compressa*). Closely allied to Kentucky Blue but less pleasing in color. Recommended for soils too droughty or too deficient in fertility for the growth of better grasses.

**Rough Stalked Meadow Grass** (*Poa trivialis*). A splendid grass for lawns, fairways and, in fact, putting greens where the shade is dense and where other grasses will not thrive. Fine bladed, short growing and dark green in color.

**Wood Meadow Grass** (*Poa nemoralis*). A shade grass of doubtful value except under special conditions.

### THE FESCUES

Approximate rate of seeding—75 lbs. per acre.

**Chewing's New Zealand Fescue** (*Festuca rubra fallax*). A fine bladed, wiry grass which thrives equally well in the open or in shade, creeps slowly, and produces a very durable, uniform sod brownish green in color. Blends well with other grasses. May be used for greens or fairways, and is especially recommended where the soil is light. Very resistant to wear and drought. Will tolerate close mowing in the milder climates.

**Red Fescue** (*Festuca rubra*). European Grown. In many respects similar to Chewing's Fescue, but not of as desirable a color, nor will it withstand as close mowing.

**Creeping Red Fescue.** A more stoloniferous strain of the above, but of coarser habit.

**Fine Leaved Fescue** (*Festuca tenuifolia*). On naturally dry, sandy soil this is one of the best grasses for greens. Its growth is dense, very fine and slow, and consequently, it should be sown in conjunction with bent when used on greens.

**Sheeps Fescue** (*Festuca ovina*). Suitable for dry sandy soil, but because of its tuft forming habit, should always be sown with other grasses. Of greatest value in the rough and around sand traps where a hardy grass that makes scant top-growth is required. Succeeds on very poor soils.

**Hard Fescue** (*Festuca duriuscula*). Almost identical in habit to the above, but of more rapid and slightly coarser growth.

**Meadow Fescue** (*Festuca pratensis*). A coarse grass valuable in some sections as a nurse grass. Makes good rough in sections not affected by prolonged or extreme drought.

# MICHELL'S RELIABLE GRASS SEEDS

## SEPARATE VARIETIES (Cont.)

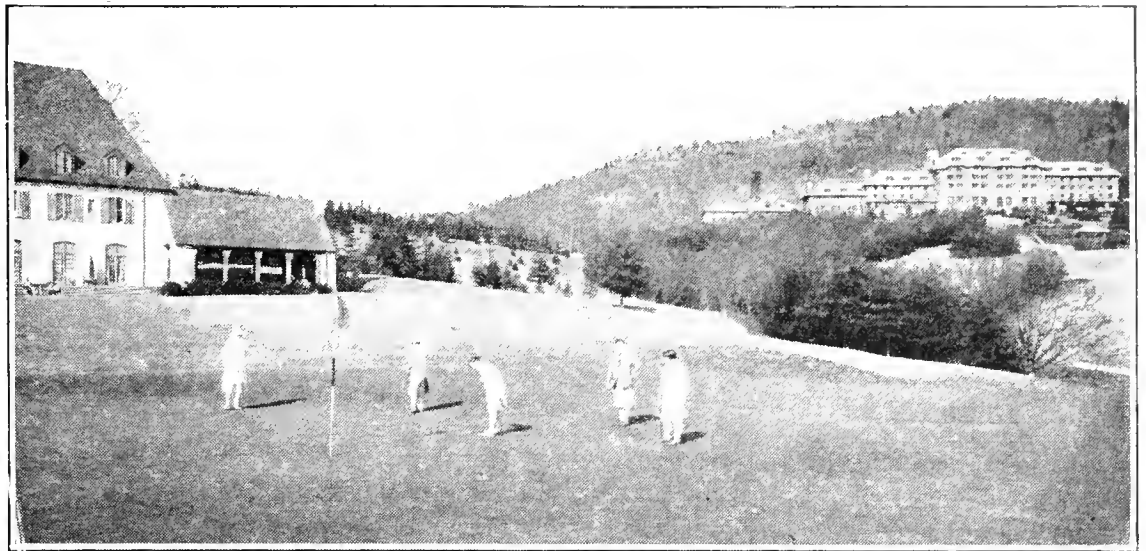
### RYE GRASSES

Sow approximately 100 lbs. per acre.

**English Rye Grass** (*Lolium perenne*). A short-lived perennial under lawn conditions, its greatest usefulness is for the quick production of a green covering on newly seeded areas. Recommended primarily as a nurse grass in mixtures or where temporary results are wanted.

**Pacey's Rye Grass** (*Lolium perenne Pacey*). A more dwarf, finer bladed strain of the above, and recommended in place of it for turf work.

**Italian Rye Grass** (*Lolium italicum*). An annual variety, used principally for temporary turf in the south. We can furnish both Irish grown and domestic seed.



### MISCELLANEOUS GRASSES

**Bermuda Grass** (*Cynodon dactylon*). A valuable summer grass for greens and fairways as far north as Washington, D. C., above which latitude it is not satisfactory. It is necessary to top-dress such turf in the fall and seed with rye grass or red top since Bermuda grass becomes dormant in cooler weather.

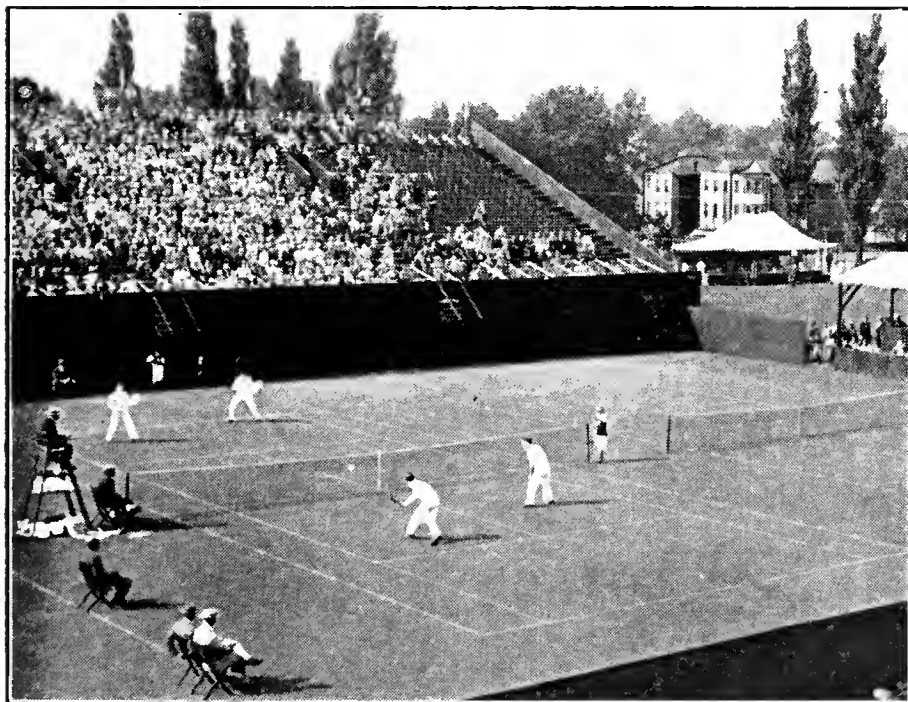
**Orchard Grass** (*Dactylus glomerata*). Quick-growing, broad leaved, tuft forming grass. May be used in the rough in partial shade.

**Crested Dog's-tail** (*Cynosurus cristatus*). A desirable turf grass, satisfactory only under favorable conditions. Tolerant of drought and poor soil.

#### WHITE DUTCH CLOVER

Where its presence is not objectionable, white clover is a desirable ground cover because of its rich, compact growth, its hardiness and resistance to drought, and because it adds nitrogen to the soil, stimulating the growth of grasses growing with it.

## MIXTURES FOR VARIOUS SPORTS



### TENNIS COURT MIXTURE

Our formula for Lawn Tennis Turf is composed of various grasses that will produce a perfect playing surface and thrive during the entire season under proper care, withstanding hard play, frequent rolling and close mowing. Sow one pound to 150 square feet.

5 lbs.....\$3.00 | 25 lbs.....\$13.50  
100 lbs.....\$52.00

### ATHLETIC FIELD MIXTURE

This mixture has been perfected for use on football, baseball, hockey, polo and cricket grounds, where first class turf is required. For many years we have supplied athletic clubs and universities with this mixture, and can recommend it as the very best for such purposes. Sow 150 to 200 lbs. per acre, depending on the thickness desired.

5 lbs.....\$1.90 | 25 lbs.....\$8.00  
100 lbs.....\$30.00



## SOIL CONDITIONING EQUIPMENT

### KEMP POWER SOIL SHREDDERS



#### KEMP SHREDDER WITH SQUARE REVOLVING SCREEN ATTACHMENT

Equipped with screen attachment, the KEMP Power Soil Shredder shreds, mixes and sifts soil and manure or fertilizer in one operation. When the Kemp makes compost it is the finished product ready for use—and entirely free from stones, roots or other hard substances.

Golf clubs everywhere are improving greens and fairways—with great savings in time and labor—with Kemp Power Soil Shredders. They are also widely used by parks, cemeteries and landscape architects. The new Kemp models incorporate 15 years of improvements.

#### SPECIFICATIONS:

No. 1. Powered with either 1½ h.p. electric motor or 2 h.p. gas engine. Capacity from 6 to 8 cu. yds. per hour. With either electric motor or gas engines.....\$260.00

No. 2. Powered with either 3 h.p. electric motor or 4 h.p. gas engine. Capacity from 12 to 16 cu. yds. per hour. With either electric motor or gas engine.....\$400.00

Square revolving screen attachment furnished with either ¼" or ½" square holes. For No. 1 model only.....\$90.00

Shaker screens can also be furnished with either ¼", ½", ⅜" or ¾" holes. For No. 5, No. 1 and No. 2 models.....\$70.00  
Prices F.O.B., factory

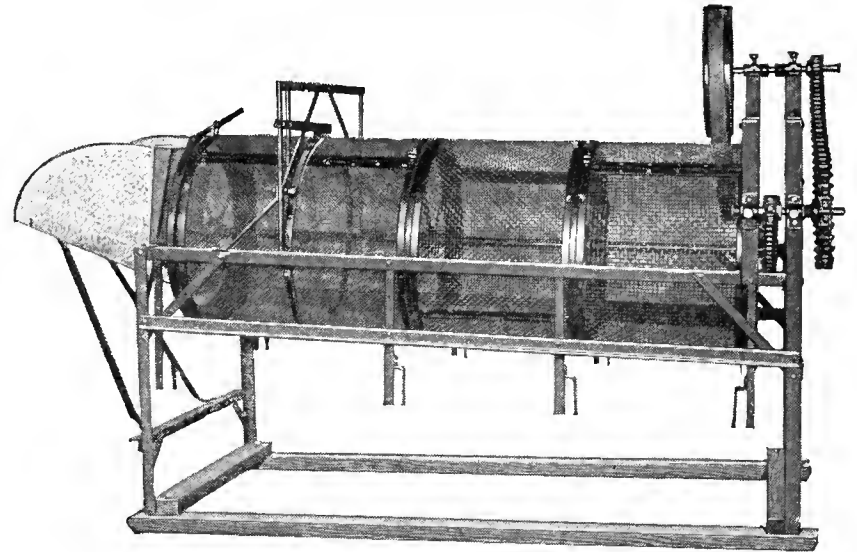
Screen attachments are easily removed or attached. They can be purchased later if found to be needed.



**KEMP No. 2 ELECTRIC**

Soil, sod, clay or manure—wet, dry or stony—are shredded to exactly the right texture, retaining the plant fibers necessary to aerate and start rapid decomposition.

### ROTARY-SOIL-SCREENS



The soil Screen offers a quick and efficient method of preparing soil or screening compost for top-dressing turf. The popular model illustrated has a capacity of 2 to 6 yards per hour depending on the condition of the material. Any mesh screen can be furnished, the same throughout, or three different sizes. We advise ¼ in., ⅜ in. and ½ in. as the most desirable and these are sent unless otherwise instructed.

No. 1. Belt Drive.....\$165.00  
No. 3. With self-contained one cylinder ¾ h.p. gasoline engine..... 295.00

F. O. B. Factory

### ROYER COMPOST MIXERS

In one operation the Royer Compost machine mixes, sifts, and loads the finished compost faster than can be done by any other method, with a saving of from 70% to 90% in labor. A steel-tooth-studded belt moving at high speed rakes and forces the material through a narrow aperture.

Model "M-2" — (Illustrated) Belt Drive. Will take soil, sand and manure as fast as three men can shovel it into the hopper, preparing from 5 to 8 yards per hour.....\$550.00

Model "O" — Above machine mounted on a truck with 2 cylinder 6 H. P. gasoline engine. \$945.00

Model "K"—Belt Drive. A smaller machine that will take care of normal top dressing requirements. Capacity 3 to 4 yards per hour.....\$375.00

Model "H"—The Model "K" machine mounted on a truck with a single cylinder 2 H. P. gasoline engine.....\$580.00

Prices F. O. B. Wilkes-Barre, Pa.

Write for complete details.



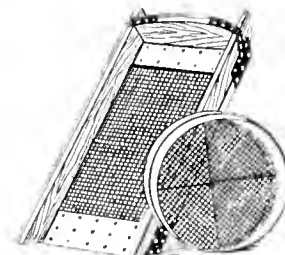
### SIEVES

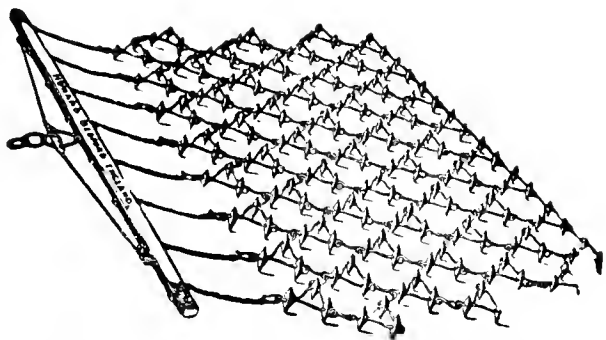
#### Upright

For soil, gravel, sand, etc. Steel bound spruce frame with hinged upright support. Made with any size mesh of extra heavy grade foundry wire. Price.....\$16.00

#### Hand Sieves

With reinforced round wooden frame. Light but very sturdy. Any size mesh. 18-inch, Galvanized wire \$1.50 each.

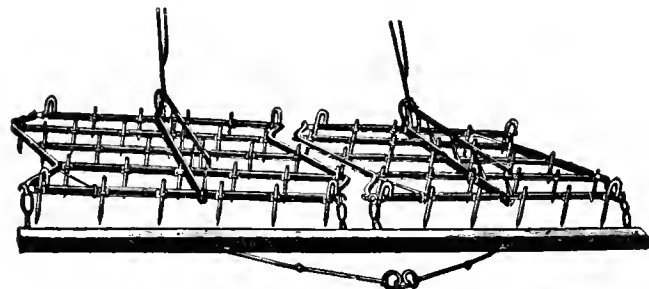




**SCOTCH CHAIN HARROW**

One of the best harrows for pulverizing the soil, leveling, etc., also splendid for covering grass seed.

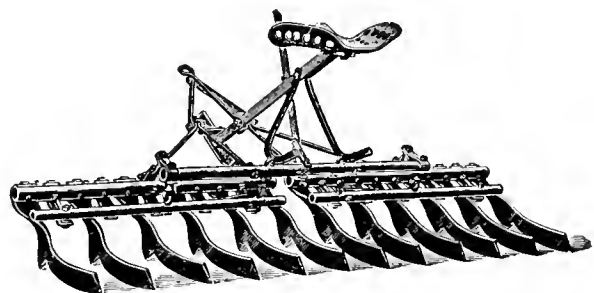
No.	Dimensions	Weight	Price
No. FH1/2R.	5 x 6 ft.	143 lbs.	\$30.00
No. FH2R.	6 x 7 3/4 ft.	257 lbs.	40.00
No. FH3R.	9 x 11 ft.	380 lbs.	50.00



**SPIKE TOOTH HARROW**

These are equipped with levers for changing the depth of cultivation, easily adjusted.

25 tooth, 1 sec.	\$12.00
30 tooth, 1 sec.	15.00
50 tooth, 2 sec.	25.00
60 tooth, 2 sec.	30.00

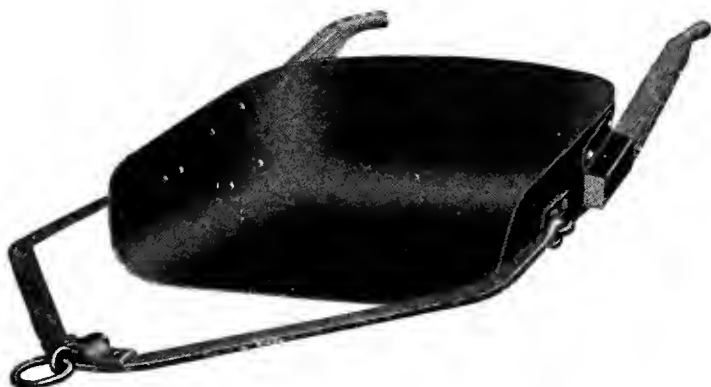


**ACME HARROW**

This will be found by those having a large acreage an indispensable implement for pulverizing and crushing the ground.

No.	Description	Price
No. 12F.	6 ft. covering area, 2-horse	\$32.50
No. G.	3 ft. covering area, 1-horse	17.00

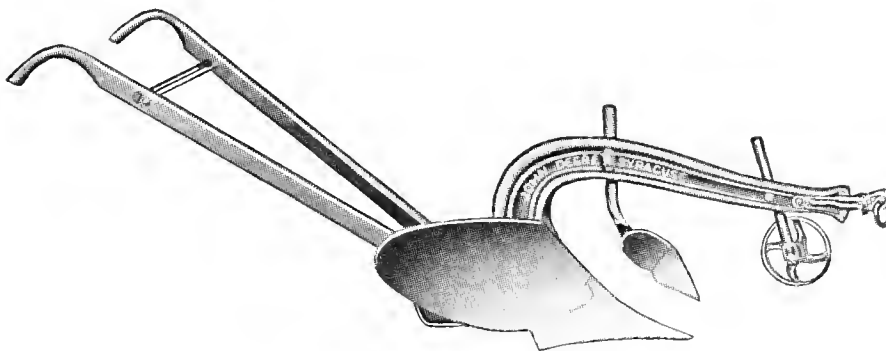
Extra blades or coulters, \$1.00 each.



**STEEL ROAD SCOOPS**

For dragging soil from one place to the other, grading, filling in, etc.

No.	Capacity	Price
1.	7 cubic feet	\$10.50
2.	5 cubic feet	10.00
3.	3 cubic feet	9.50



**SYRACUSE PLOW**

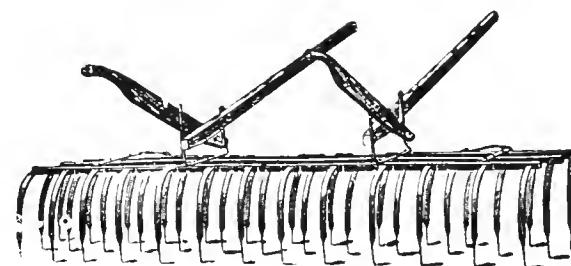
This is by far the most satisfactory plow for golf course work. They have the iron beam and the chilled share, landside and mould board.

No. 2-1878 Plain	\$20.00	No. 402 Plain	\$23.00
With wheel and jointer	25.00	With wheel and jointer	29.00

We can also furnish heavier plows

**THE KEYSTONE WEEDER**

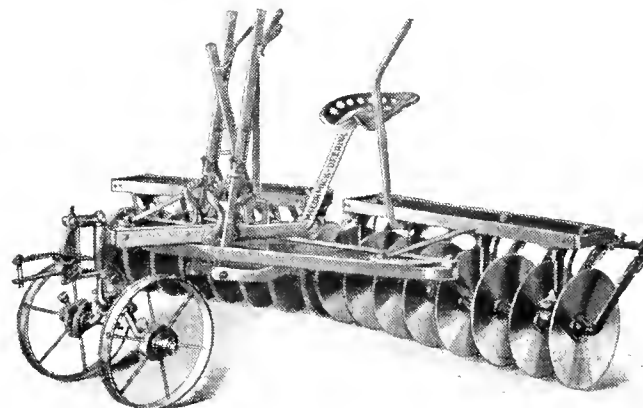
This weeder can be adjusted to cover a 7 1/2-ft. stretch. Any of the teeth can be easily removed, if it is desired not to cultivate very finely. Excellent for preparing a piece of ground prior to sowing lawn seed, etc. Equipped for one horse. Price, \$15.00.



**DISC HARROW**

These harrows have the centre pressure lever, solid blades and scraper, very satisfactory for heavy work.

4 ft. cut, 8-16-in. discs	\$48.00
5 ft. cut, 10-16-in. discs	52.50
6 ft. cut, 12-16-in. discs	58.50
Fore truck	\$10.00 extra

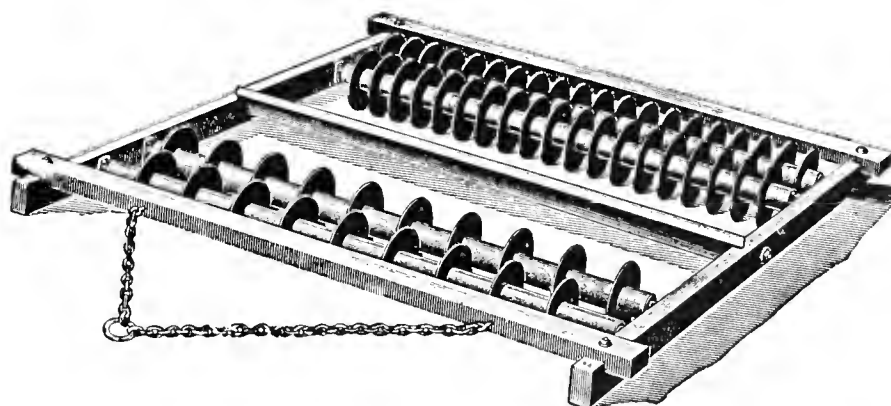


**MEEKER SMOOTHING HARROW**

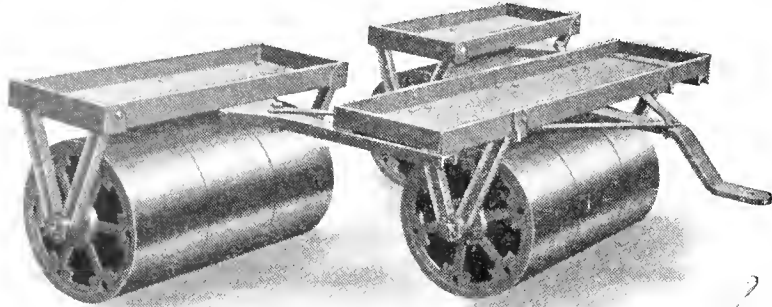
The Meeker Harrow is invaluable in the final preparation of land for seeding; it leaves the soil in a condition similar to that obtained by hand-raking. The frame is of wood, holding four sets of discs. We offer three sizes:

No. 1.	Frame 4 ft. 6 in. by 4 ft., with 46 8-in. discs	\$38.00
No. 2.	Frame 6 ft. 8 in. by 6 ft., with 58 8-in. discs	42.00
No. 3.	Frame 8 ft. by 6 ft., with 82 8-in. discs	55.00

Nos. 1 and 2 are suitable for horse traction, while No. 3 is suitable for tractor use.



**TANDEM GOLF ROLLER**  
Three Gang



A Flexible Tractor Roller for large areas. Completely rolls uneven ground. Heavy angle steel frame, cast iron drums, roller is flexible and gangs work independently.

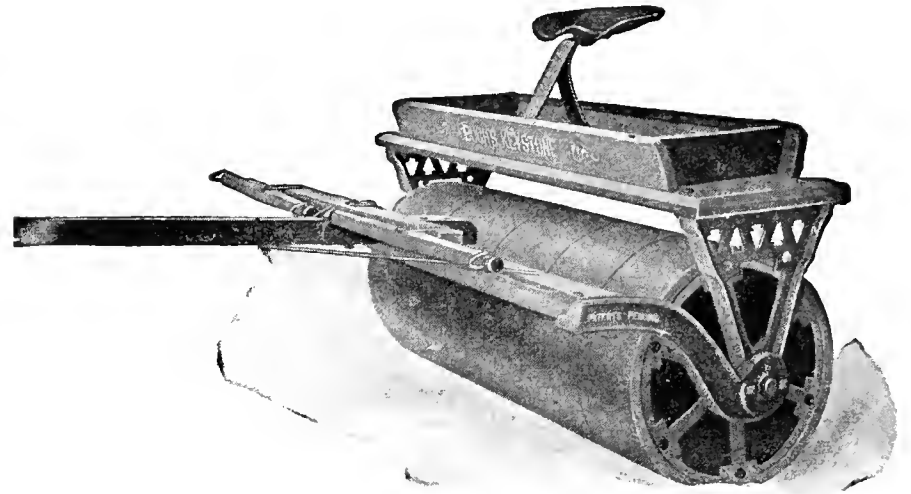
	Diam.	Gang.	Sections	Weight	Price
No. 390	20 in.	3	9	1650 lb.	\$160.00
No. 391	24 in.	3	9	2200 lb.	200.00

F. O. B. Factory

This roller is also available with water-ballast drums, 18-in. diameter by 24-in. wide, with a weight range from 750 to 1350 lbs. depending on the amount of ballast used.

No. 400. Water Ballast Roller (three gang). Price.....\$100.00  
F. O. B. Factory

**GOLF ROLLERS**



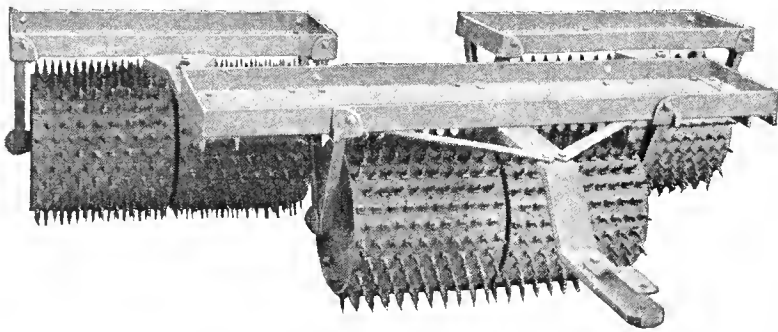
**Horse or Tractor Hitch**

Made of cast iron carefully finished with beveled edge drums; equipped with shafts for horse or tractor hitch; all sizes are equipped with weight boxes.

No.	Diam. Inches	Length Ft.	Sections	Weight Lbs.	Price
370	20	5	5	1150	.....\$115.00
372	24	5	5	1450	..... 135.00
373	24	6	6	1700	..... 140.00
376	28	6	6	1950	..... 150.00

F. O. B. Factory

**SPIKE TOOTH ROLLERS**



No. 705

**Three Gang Tandem**

Fairways and large lawn areas require periodic aeration the same as putting greens. Spiking opens the pores of the ground and promotes stronger and better growth of the turf. The flexibility of the tandem spike roller assures maximum results where the contour of the ground is uneven.

No. 705.—(Illustrated) 3 Tandems of 2 Sections each. All steel construction. 18" dia., 36" wide. Rolling Space 105".

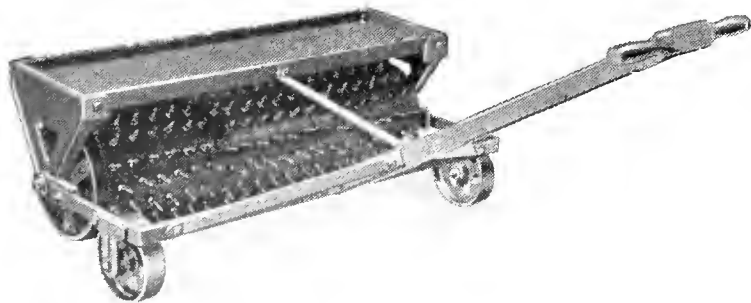
Weight 1325 lbs. Price.....\$250.00

No. 703.—3 Tandems, rollers of same construction as No. 702 (see below) with a heavy frame. Rolling Space 104".

Weight 550 lbs. Price.....\$130.00

Prices F. O. B. Factory

**PERFORATING ROLLERS**

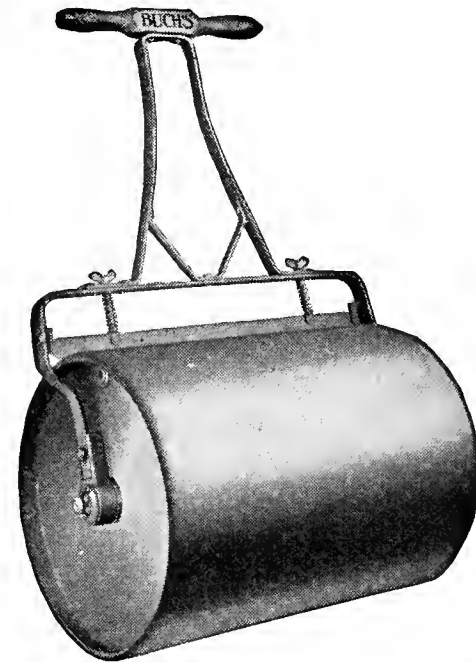


No. 702

No. 702. A practical spiker for putting greens and smaller areas. Rollers are made of seasoned oak staves with cast iron heads, closely covered with steel spikes. Three one foot sections, 10 inches in diameter, weight 190 lbs. Price.....\$45.00

No. 706. A smaller model with two all-steel sections, each 9 inches wide. Weight 70 lbs. Price.....\$25.00

**WATER BALLAST ROLLER**



Fill with Water for Weight

Light Running

Scraper to Keep Surface Clean

Round Edge No Tearing Up of Sod

Handle Always off the Ground

Can be Filled with either Water or Sand

No.	Sections	Diam. In.	Length In.	Weight Empty	Weight filled with water	Price
601	1	14	24	60	250	....\$12.50
602	1	18	24	85	330	.... 13.50
603	1	24	24	100	440	.... 16.50
604	1	24	32	135	590	.... 17.50

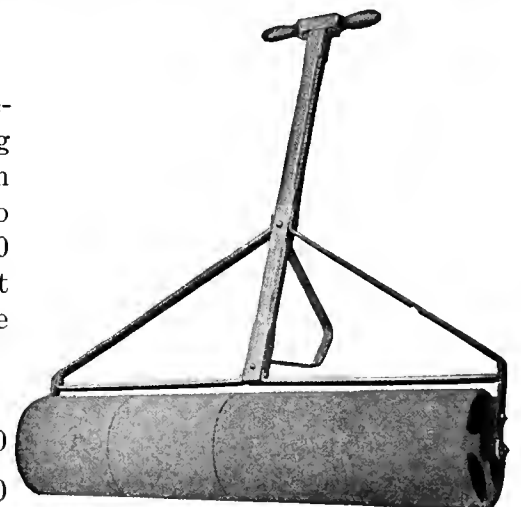
We can also supply the solid cast steel rollers in any size.

**PUTTING GREENS ROLLER**

A special purpose roller developed for use on the putting green. Four feet in width with four independent drums to facilitate turning. Weight 160 lbs. Available with either cast steel or compressed oak stave drums.

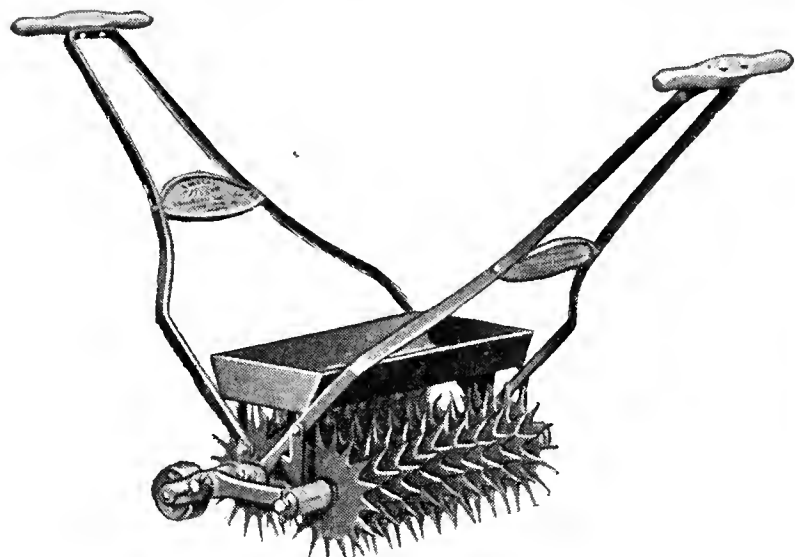
No. 700—Steel Drums...\$23.00

No. 701—Wood Drums.. 21.50





**SPIKE DISK CULTIVATOR**



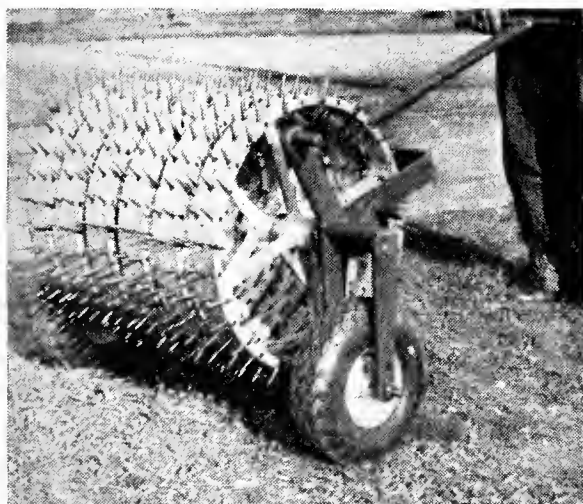
A new principle in spikers, the knife like steel saw teeth cultivate and aerate in one operation, eliminating hard baked surfaces and forming a mulch so necessary for the retention of moisture.

No. 32. 19 disks, 10 in. diameter. Rolling width 18 in. Weight 95 lbs. Furnished with two handles, this model is easily operated, and by means of the handle hooks, disks may be raised for passage over walks and other hard surfaces. Price.....\$30.00

F. O. B. Factory

Spike Disk Cultivators are available in larger sizes for use with power equipment. Write for further information.

**THE BUEL PERFORATOR**



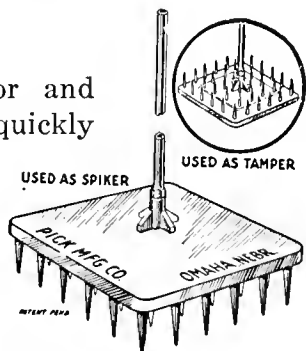
The Buel Perforator was designed to overcome the drawbacks of hand and ordinary roller methods and assures perfect spiking. The extra long spikes are individually hinged, and the angle at which they are mounted and positively stopped is such that when the roller is running forward, the spikes must enter the ground perpendicularly and pull out perpendicularly as the roller progresses forward, preventing the ripping which all fixed-spike rollers cause on the up turn. Width 24 in. Weight 300 lbs. Furnished with rubber tired wheels for transporting. Attachments, if desired, are furnished so that the Perforator may be used with power machines.

Prominent clubs are using the Buel Perforator with exceptional results. Complete information furnished on request.

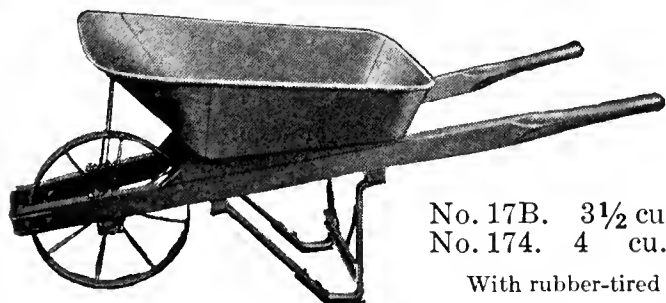
Price—\$295.00 F. O. B., Woburn, Mass.

**SPIKE TAMP**

An indestructible, combined Perforator and Tamper made of malleable iron. Can be quickly converted from Spiker to Tamper and reverse by loosening one nut. Plates 9 in. square; Spikes 1 3/4 in. long, tapering. Overall length 4 ft. Weight 13 lbs. \$3.25.



**STEEL TRAY BARROW**

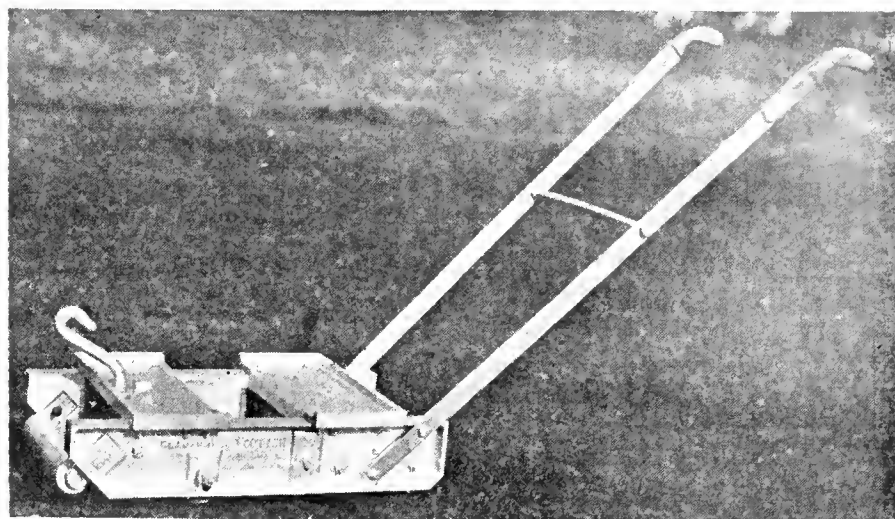


Pressed steel tray.  
Hardwood handles.  
15 1/2 in. Wheels  
4 in. tire

No. 17B. 3 1/2 cu. ft.....\$8.00  
No. 174. 4 cu. ft..... 8.50

With rubber-tired wheels \$6.00 extra

**CHAMPION SOD CUTTER**



The best and most satisfactory machine on the market. Cuts a strip 12 in. wide and to a uniform thickness of 1 to 2 in. depending on the adjustment of the knife. Sod may be rolled if desired. Can be drawn by light gear machine or tractor, and will cut in one hour as much as two men can cut in a day. There is nothing to get out of order. The tool-steel cutting knife is reversible and will last indefinitely.

Price, \$48.00 Extra Knives, \$11.50 each.



American

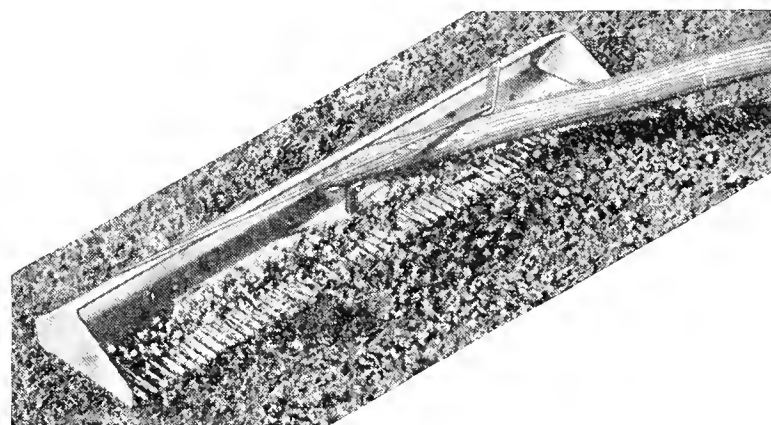


English

**TURF OR SOD LIFTERS**

**American.** Steel blade, with an 18-inch steel shank and wood D handle. Price, \$1.90 each.

**English.** Best steel, with pointed edge to facilitate cutting. Price, \$5.75 each.



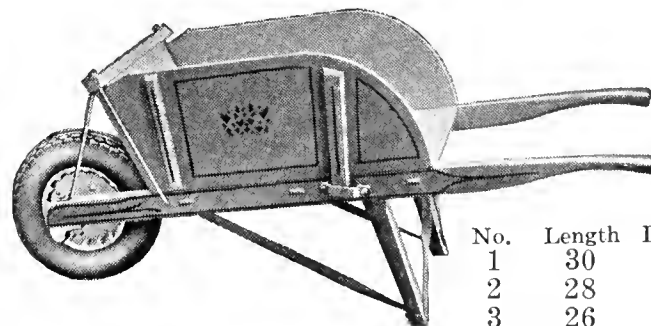
**EARLY BIRD RAKE**

This Rake is the most satisfactory and economical for use on the golf green for removing worm casts and litter, and for combing before cutting the grass. It is endorsed by the leading greenkeepers and golf-course experts.

Width, 30 inch, weight, 8 1/2 lbs., each.....\$8.50

**PUTTING GREEN BARROW**

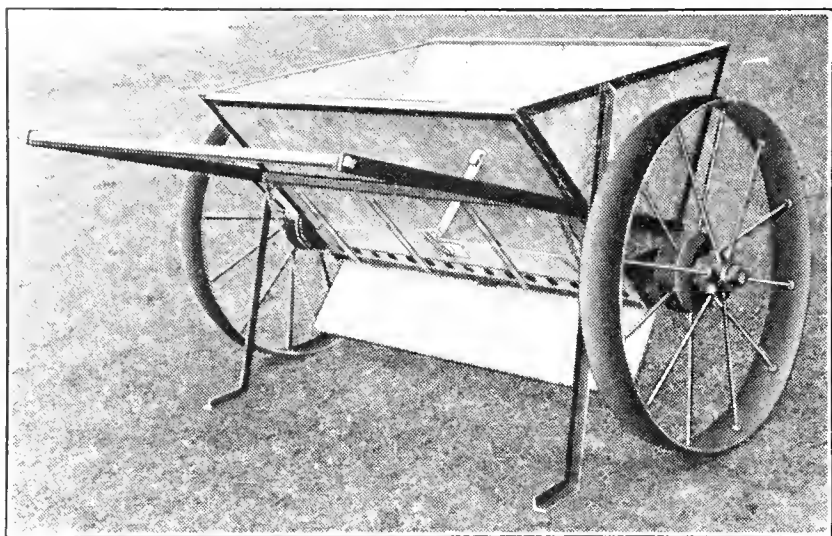
Body of seasoned hardwood, with removable sides. Pneumatic wheel shown is not standard equipment, but can be furnished extra at \$5.75. For all sizes.



2 3/4 in. steel tire on all sizes.

No.	Length	Depth	Width	Price
1	30	12	25	\$8.50
2	28	12	24	7.50
3	26	12	22	7.00

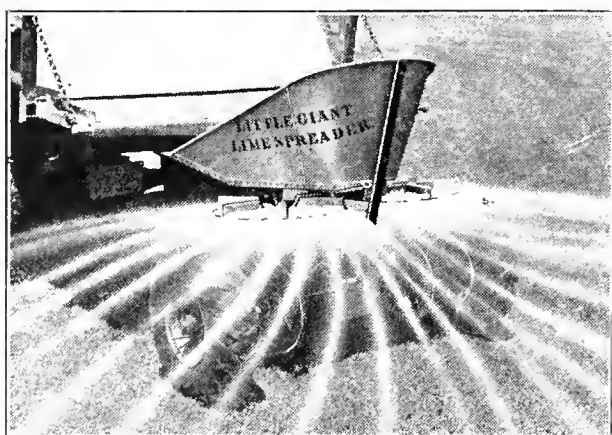
## SPREADERS AND SEEDERS

**UNIVERSAL SPREADER NO. 615**

This improved top-dressing spreader automatically mixes, breaks up and agitates the material, whether dry or moist, giving absolutely uniform coverage due to a new non-clogging force feed principle. Rate of application may be adjusted to any thickness desired, and in addition, this machine is equipped with a feeder bar with closely spaced feed outlets for applying fertilizer or grass seed. All materials leave the scatter board in an unbroken ribbon 36 in. wide. The heavy, galvanized metal hopper holds 6 cu. ft. of material. The wheels have 4 in. semi-convex tires which will not affect the finest turf. Shipping weight 225 lbs. Price . . . . . \$65.00

**LITTLE GIANT SPREADER**

The "Little Giant" spreads compost, wet or dry lime and fertilizer (except manure) on greens and fairways *accurately and quickly*. Developed from a principle tried and proven in the agricultural field, this machine spreads by means of *two* revolving (400 R.P.M.) copper alloy steel fans, over an area of from 8 to 20 feet, depending on the coarseness of the material. Positive action agitator prevents clogging and feed openings can be easily adjusted to any quantity desired. Attaches quickly to truck or trailer from which the material is fed to the hopper. With two shovelers, Little Giant will accurately spread more fertilizer than three trucks and a dozen men using older methods.



Large pneumatic tires give traction and will not injure the finest turf. Fans may be disengaged when not in use. Weight 214 lbs.

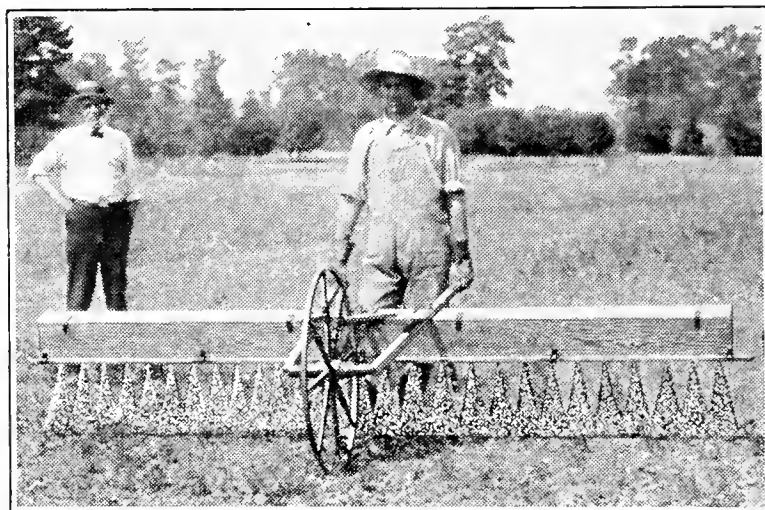
Price \$76.00 complete, F. O. B. Factory.

**STEVENS FERTILIZER DISTRIBUTORS**

The Stevens Distributors, popular favorites for many years where correct and scientific application is necessary, will readily handle all commercial fertilizers, lime, sand, etc.

Horse Machine—For use on large areas. No. 5, One Horse, width 5' 10", capacity 6 bu. Price, \$70.00. No. 8, Two Horse, width 8' 3", capacity 9 bu. Price, \$75.00. Tractor hitch can be substituted for shafts.

Hand Machine—Width 34 inches, capacity 1½ bu. Price, \$25.00.

**FAIRWAY SEEDER NO. 106**

This Seeder was developed especially for seeding golf courses, parks and country estates. Wind or mud do not interfere with its accurate work because it sows close to the ground and cannot clog. It is quickly adjusted to handle any kind of seed and mixed seed in any quantity desired, and gives an absolutely uniform 10-ft. spread as fast as a man will walk. Also satisfactory for spreading Sulphate of Ammonia and similar fertilizers.

Where there is large acreage to cover, two or three seeders enable the job to be done quickly, just when the soil is in the right condition to receive the seed.

Shipping weight 60 lbs. Price \$20.00.

**WHEELBARROW GRASS SEEDER NO. 5**

Same principle as the Fairway Seeder but of lighter construction with wider coverage, the hopper being 14 ft. wide. Available with either rope feed or chain feed.

Price \$17.00.

**VIGORO SPREADER**

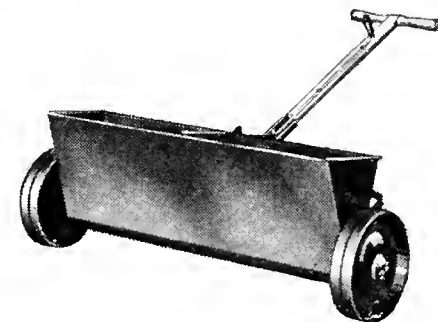
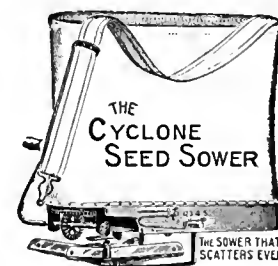
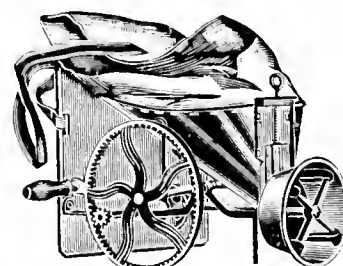
A sturdy all-metal spreader for distributing seed, plant food, dry chemical preparations and other materials. The non-clogging force feed and positive shut-off slide with dial control for various rates of application, assure absolutely uniform spread.

Standard Model — 24-inch spreading width, capacity 75 lbs. Shipping weight 39 lbs.

Price, \$10.25.

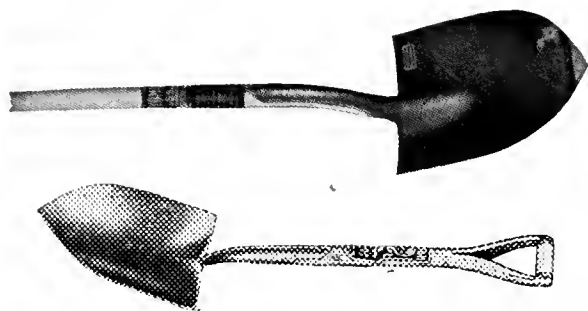
Special Model—36-in. spreading width, capacity 115 lbs. Shipping weight 51 lbs.

Price, \$17.00.

**BROADCAST SEED SOWERS**

These handy seeders can be regulated to broadcast seed of any size, at any desired rate.

Cahoon . . . . . \$5.00  
Cyclone . . . . . 2.50



**SHOVELS**

Shovels can be furnished with either round or square point and with long, straight, or short "D" handle, all at the same price. Specify type desired when ordering.

Conneaut—Full polished, plain back, strap pattern. Steel "D" handle.....\$1.75

Fox—Full polished high grade steel. One piece solid shank. Steel "D" handle...\$1.60

Empire—Carbon steel, strap pattern. Good quality.....\$1.15



**STEEL SCOOP SHOVELS**

Strapped shanks, wood D short handles.

- No. 3. 11-inch mouth.....\$1.45
- No. 5. 12-inch mouth..... 1.60
- No. 6. 13-inch mouth..... 1.65



**STEEL SPADES**

- Fox, short handle.....\$1.60
- Conneaut, short handle..... 1.75
- Nursery, Conneaut's Special..... 3.25
- Empire, short handle..... 1.15



**MANURE FORKS**

Strapped Shanks.

- 044½—4-tine, long handle.....\$1.40
- 163 —4-tine, heavy, short handle.... 1.90
- 05W—5-tine, medium, short handle... 1.85



**ENGLISH DIGGING FORK**

No. ED4. The prongs are solid steel, with square instead of round edges, which adapts it especially for digging in heavy soil, in which it works with ease.....\$2.50



**SPADING FORKS**

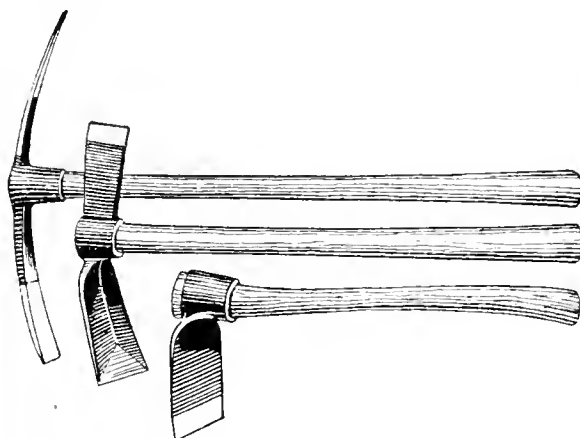
Strapped shanks, short or D-wood handle. Made of best quality steel.

- No. OHW. 4-tine.....\$1.65
- No. 05HW. 5-tine..... 2.00



**AXES**

Plumb Make. Medium or heavy, made of best quality steel with handle, \$2.25.



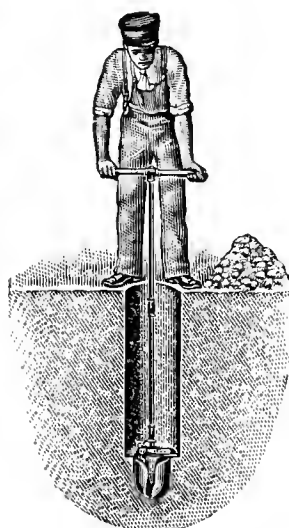
**PICKS (Price includes Handle)**

All steel, double point, \$1.55.

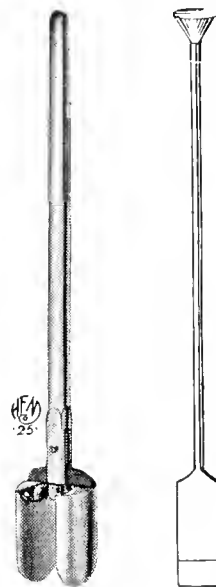
**MATTOCKS**

(Price includes Handle)

- Axe pointed.....\$1.55
- Pick pointed..... 1.55
- Half Mattocks or Grub Hoes..... 1.40



No. 8 Digger



Eureka

Spade

**POSTHOLE DIGGERS**

No. 8. This bores a hole 3½ ft. deep and can be adjusted in diameter from 8 to 14 inches, \$5.25.

No. 15. Eureka. Crucible steel blades, split handle 4 ft. long bolted to heavy malleable castings, \$1.90.

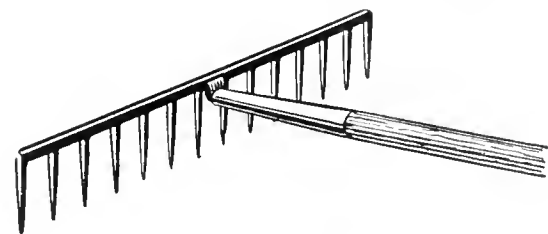
Post Hole Spade. All steel with tamper end, \$2.75.

**SCUFFLE HOES**

Made of best steel.

- 5-inch.....\$0.80
- 6-inch..... .85
- 7-inch..... .90
- 8-inch..... 1.00
- 10-inch..... 1.20

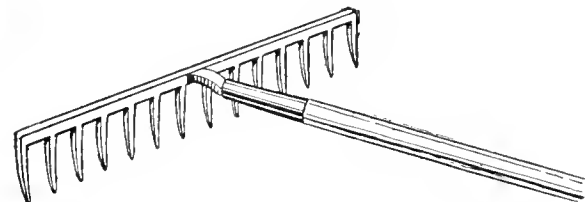
Handles for Scuffle Hoes 25c. each, extra.



**STEEL GARDEN RAKES**

Made of best cast steel, with long teeth.

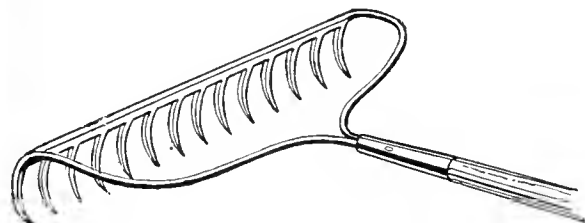
No. 12.....\$0.90	No. 16.....\$1.05
No. 14..... 1.00	No. 18..... 1.10



**STEEL SAND RAKES**

Short strong teeth make this rake suitable for heavy work in sand and gravel.

No. G14.....\$1.15	No. G16.....\$1.25
--------------------	--------------------



**STEEL BOW RAKES**

Preferred by many to the regular garden rake, the teeth being slightly bent toward the operator.

No. B12.....\$1.10	No. B14.....\$1.15
B16.....16-tooth.....\$1.25	



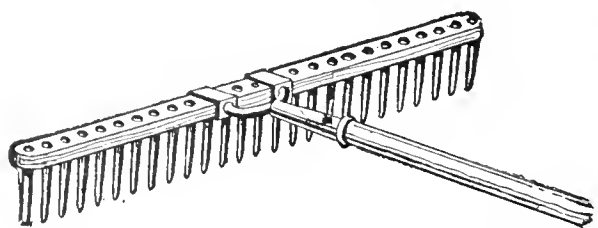
**EXCELSIOR RAKE**

An exceptional rake 24" wide, with 36 teeth, braced on shoulders as shown. This rake is for special work on tennis courts, new work on golf greens, lawns, and for general purposes where a fine rake is required.

Price, \$2.50

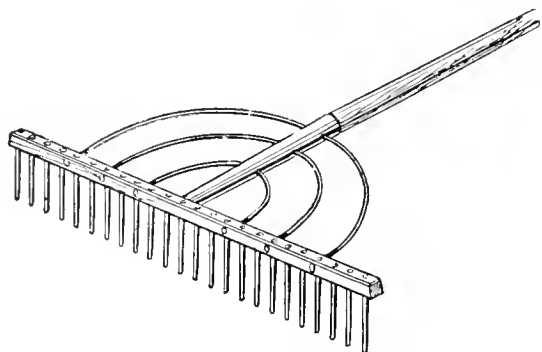
# LAWN CLEANING EQUIPMENT

## OLE OLSEN LAWN RAKE



Made of best hard wood, well braced; teeth set close together. A very popular sand-trap rake.

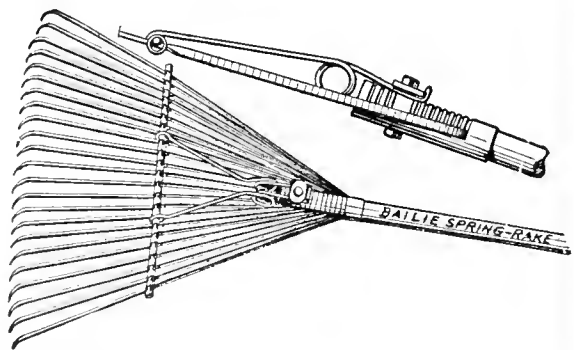
26-tooth, hickory wood. Price, 90c.



Ames, No. 37X Rake

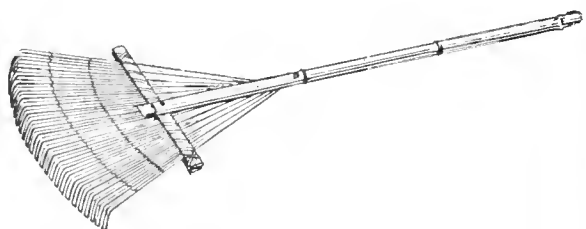
## WOODEN RAKES

Ames, No. 37X. 24-tooth, steel bows, \$1.10  
 Ames, No. 30X. 14-tooth, steel bows, .80



## BAILIE SPRING RAKE

Fitted with extra heavy spring from handle to spacer; has 24 teeth made from spring wire, slotted and keyed throughout; ideal for lawn or driveway. Price, \$1.70.

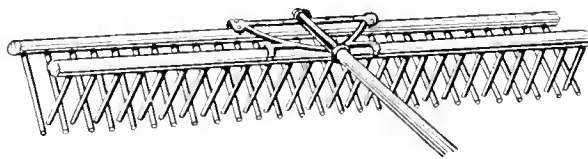


## BAMBOO RAKE

Made of split bamboo, rigidly secured, with handle. Just the thing for cleaning grass clippings from greens.

18-inch, with bamboo handle . . . . . \$0.30  
 18-inch, with hardwood handle . . . . . .65  
 24-inch, with bamboo handle . . . . . .90  
 30-inch, with hardwood handle . . . . . 1.40

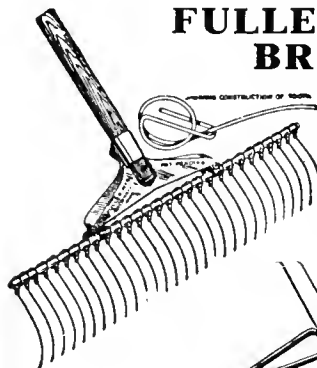
## AUTOMATIC LAWN RAKE



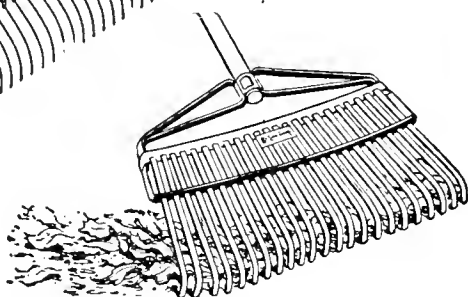
A backward motion of the operator clears all the teeth at once.

Wood, 26-tooth . . . . . \$1.50  
 Wood, 38-tooth . . . . . 1.70

## FULLER LAWN BROOM

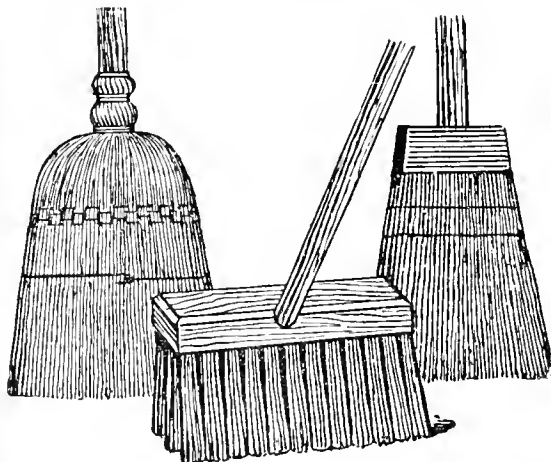


Well made of good material; has 28 flexible, spring steel teeth,  $\frac{3}{4}$  inches apart. Price, \$1.40.



## LAWNCOMB RAKE

The Lawncomb cleans without injuring tender growing grass. Frame is one-piece steel construction; electrically welded ends. 20-inch, natural finish handle, \$1.50.



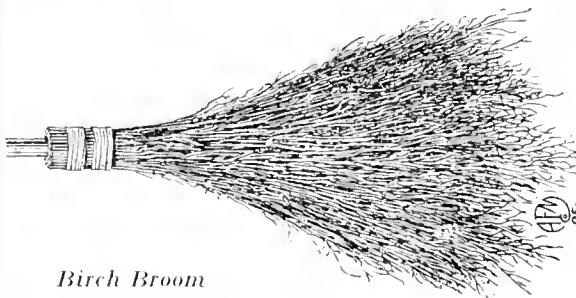
Plain Corn Rattan Push Jap. Fibre

## BROOMS

No. 230. Japanese Fibre . . . . . \$0.90  
 No. 8. Corn and Rattan mixed . . . . . .90  
 No. 7. Plain Corn, extra quality . . . . . .90

## ROAD BRUSHES

No. 271. Rattan Push, 14-inch . . . . . \$0.95  
 No. 1414. Bass or Cocoa Push, 14-inch. .95



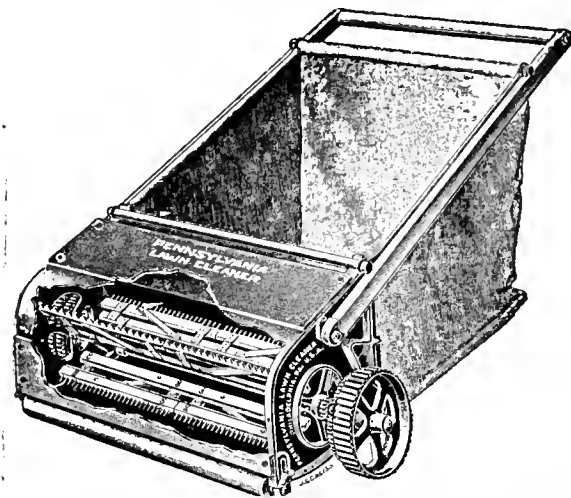
Birch Broom

## BIRCH BROOMS

The ideal broom for the green's, made extra heavy, to withstand wear. Without handle.

Price, 25c. each; \$2.75 doz.

## PUTTING GREEN CLEANER

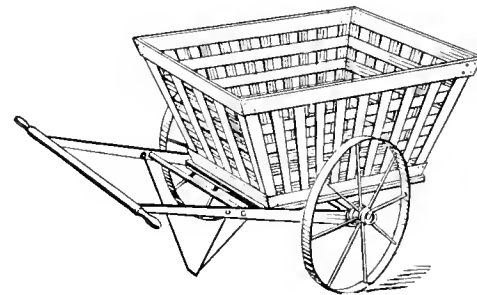


The flexible rake bars are of wood, with steel spring teeth; they rotate just like a lawn mower cylinder and clean up every particle of leaves, litter or rubbish, throwing it into a removable receptacle which is of large capacity.

Price, 24-in. Cleaner, with steel rakes, \$28.00.

Please specify when ordering if wanted for lawns or putting greens.

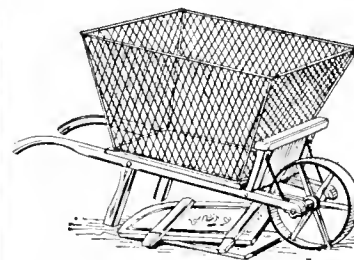
**Sweeping Brushes.** Can be readily interchanged with the Rake for sweeping lawns, putting greens, paths, removing worm casts, etc. Price per set of three, 24-inch, \$6.50.



## WOODEN LEAF RACKS

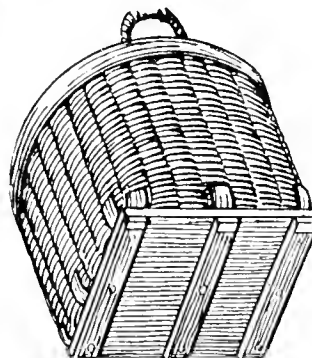
Leaf Rack only, no truck . . . . . \$10.00  
 Leaf Rack with  $3\frac{1}{2}$ -inch tire truck . . . 28.50

## KEYSTONE LEAF RACKS



This rack can be used on wheelbarrows with removable sides. Convenient for gathering leaves, cut grass and rubbish. Has a capacity of 10 bushels; made of galvanized wire, bolted to a wooden base. Price not including wheelbarrow, \$8.00.

## RUBBISH BASKETS



A handy basket for gathering rubbish and litter. Holds 3 bushels and can be carried or wheeled on a barrow. Price, with rope handles, \$3.75 each.

# SUPER BULL DOG WATER HOSE

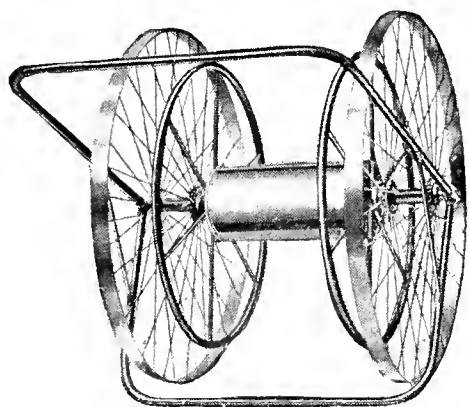


## WATER HOSE THAT LASTS!

Super Bull Dog Water Hose gives longer service because it stays alive—resists broiling sun and even freezing temperatures. Its extra toughness means long life, and long life means **SERVICE!** Standard equipment on many of the country's finest courses. Made in  $\frac{3}{4}$ " and 1" sizes, coupled with special extra heavy couplings.

Choose Super Bull Dog for deluxe appearance and for economical operating costs.

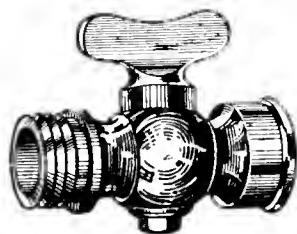
## WIRTS HOSE REELS



Wirts reels are undoubtedly the best on the market. Made entirely of heavy steel tubing and malleable iron castings. Style 30-B rolls on its reel rims, Styles 31 and 32C have the reel and frame mounted on extra steel wheels, with  $1\frac{1}{8}$  in. tire. Enameled red.

- No. 30B. Capacity  $\frac{3}{4}$  in. hose, 400 ft. . \$8.00
- No. 30B. Capacity 1 in. hose, 150 ft. . 8.00
- No. 31C. Capacity  $\frac{3}{4}$  in. hose, 500 ft. . 14.00
- No. 31C. Capacity 1 in. hose, 200 ft. . 14.00
- No. 32C. Capacity  $\frac{3}{4}$  in. hose, 800 ft. . 28.50
- No. 32C. Capacity 1 in. hose, 350 ft. . 28.50

## SHUT-OFF CONNECTION



Cast brass, polished. For  $\frac{3}{4}$  in. hose.

- Each . . . . . \$1.00
- Dozen . . . . . 10.00

## RUBBER HOSE

Available in any length up to 500 ft. Sections 25 ft. or over coupled free.

	Per ft.
Super Bull Dog 1" . . . . .	\$0.28
Super Bull Dog $\frac{3}{4}$ " . . . . .	.21
Michell's Special $\frac{3}{4}$ " . . . . .	.15
Michell's Special $\frac{1}{2}$ " . . . . .	.13
Spray Pump Hose $\frac{3}{8}$ " . . . . .	.14
Hose Washers (Rubber). $\frac{3}{4}$ " 45c. per lb.;	
1" 95c. per lb.	

## HOSE COUPLINGS



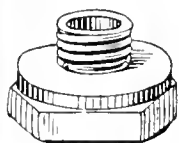
Perfect. Clamp principle eliminates use of bands. No projections to tear up grass. Specify whether for  $\frac{1}{2}$ " or  $\frac{3}{4}$ " hose. \$2.75 per doz. pairs.

## TRADUR HOSE CONNECTORS

Eliminates bother and waste of time in hose connecting; a quarter turn does the job; non-leaking even with high pump pressures; no springs, hooks, levers or special washers; gives long and satisfactory service.

- $\frac{3}{4}$  in. Faucet part 35c.
- $\frac{3}{4}$  in. Hose part 75c.
- Complete set \$1.10.

Special prices on larger quantities.



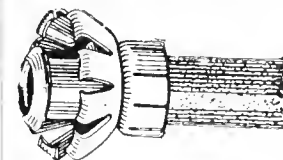
## HOSE REDUCERS

For reducing 1 inch pipe to fit regular  $\frac{3}{4}$  inch hose. Each, 30c.

## HOSE MENDERS

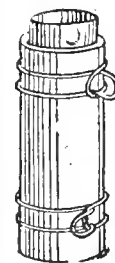


Cooper's. One piece, solid brass construction. For  $\frac{3}{4}$ ,  $\frac{5}{8}$ , or  $\frac{1}{2}$  in. hose. Ea. 10c.; doz. 90c.

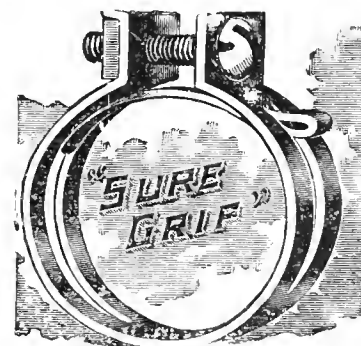


Perfect. Made entirely of brass, with swivel motion. No band required. For  $\frac{1}{2}$  and  $\frac{3}{4}$  in. hose. Ea. 10c.; doz. 90c.

## HOSE BANDS

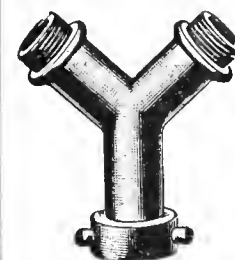


Caldwell Band as applied to Hose



Doz. Gross  
Caldwell. Specify 3 or 4ply hose \$0.35 \$3.25  
Pliers for the above, 30c. per pair.

Sure Grip. Sizes  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$  . . . \$0.35 \$3.25



## SIAMESE CONNECTION

This permits one lead of hose to be diverted in two or more directions, depending on water pressure. For  $\frac{3}{4}$  in. hose. Price, 90c. ea.

TRADE  
**SKINNER**  
SYSTEM  
OF IRRIGATION.

MARK.

for  
large area  
watering

**Fairways**  
**Greens**  
**Tees**  
**Cemeteries**  
**Parks**  
**Estates**



Skinner Fairway System with Broadway Sprinklers in Operation

**FAIRWAY IRRIGATION**

No investment will give a Golf Club greater returns than an adequate and efficient irrigation system. A Skinner System, as a supplement to nature's rain, assures constant growth and development of large turfed areas, in addition to many savings in maintenance costs. Maximum returns from seed and fertilizer, reduction in labor and water costs as well as watering time, and most important, the increased membership resulting from an attractive, well-kept course, are direct results of Skinner installation.

We will gladly send, without obligation, a specialized representative to any club seriously considering fairway irrigation. Write for further details.

**SKINNER SPRINKLERS**

The most important item of a watering system, Skinner has developed sprinklers to a degree of perfection unsurpassed in the field. Complete coverage of the widest range combined with simplicity of construction, dependability and longer wear, have made Skinner Sprinklers the best sprinkler for large area watering.

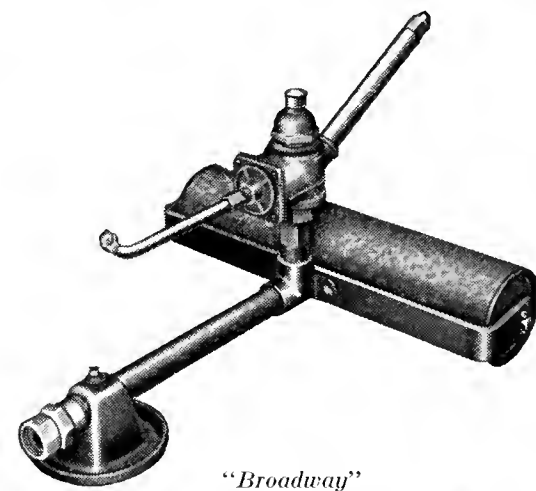
**BROADWAY**—A slow motion revolving sprinkler of solid brass construction, simple, sturdy, and the best large area sprinkler that is manufactured. Nozzles are scientifically designed to secure maximum throw with an entire uniformity of coverage. The *two point* bearing, with the reaction from the main nozzle midway between, increases the life of the sprinkler and insures dependability.

**BROADWAY JUNIOR**—Operation and distribution of this sprinkler is identical to that of the Broadway, in similar models, with a lower range of capacities, however. (See table below.) Single bearing design.

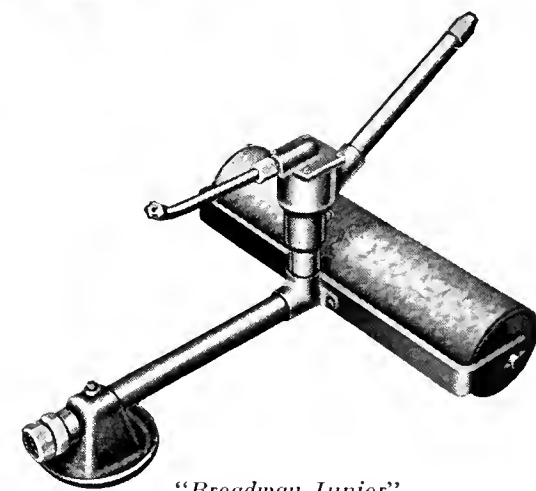
Nozzle tips of three sizes are furnished with both sprinklers.

**SPRINKLER PRICE LIST**

	"BROADWAY"	"BROADWAY JUNIOR"
3/4", Head Only.....	\$12.00	\$9.75
1", Head Only.....	16.00	13.75
1 1/4", Head Only.....	26.00	—
3/4", On Skid Base..... 3/4" Hose Conn.....	15.25	13.25
3/4", On 14" Roller, 3/4" or 1" Hose Conn.....	16.50	14.25
1", On 22" Roller..... 1" Hose Conn.....	22.00	19.75
1", On 22" Roller..... 1 1/4" Hose Conn.....	23.25	21.00
1 1/4", On Double Roller.... 1 1/4" Hose Conn.....	38.25	—



"Broadway"



"Broadway Junior"

**PERFORMANCE CHART FOR BROADWAY AND BROADWAY JR. SPRINKLERS**

	Pressure lbs. Sq. In.	Main Nozzle (In.)	G. P. M.	Diameter in Feet	Main Nozzle (In.)	G. P. M.	Diameter in Feet	Main Nozzle (In.)	G. P. M.	Diameter in Feet
3/4" B'way & B'way Jr.	35	3/16	8.25	95	7/32	14.5	110	1/4	15.0	120
	45	3/16	10.5	100	7/32	15.0	115	1/4	17.3	130
	50	3/16	11.25	110	7/32	15.7	120	1/4	18.7	135
	60	3/16	12.0	112	7/32	16.5	125	1/4	20.3	140
	70	3/16	14.25	115	7/32	17.3	130	1/4	22.5	145
1" B'way & B'way Jr.	60	9/32	23.5	135	5/16	30.0	145	3/8	38.25	155
	70	9/32	26.25	140	5/16	32.25	150	3/8	42.0	160
	80	9/32	28.50	145	5/16	34.50	155	3/8	44.25	165
	90	9/32	30.0	150	5/16	36.75	160	3/8	46.75	170
	100	9/32	32.25	155	5/16	37.5	165	3/8	50.5	175
1 1/4" B'way	85	1/2	64	180	9/16	80	200	5/8	125	230
	100	1/2	72	190	9/16	87	225	5/8	140	230
	125	1/2	—	—	9/16	—	—	5/8	—	—

"Diameter" Means Effective Coverage—"Pressure" at Sprinkler

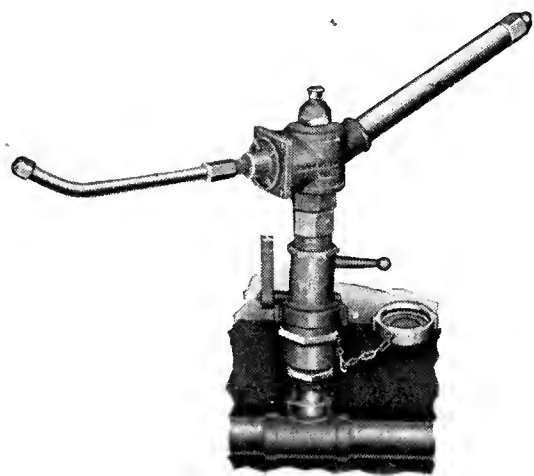
ALL PRICES SUBJECT TO MARKET CHANGES

**SKINNER  
SYSTEM**  
OF IRRIGATION.

**SELF-CLOSING SNAP VALVES**

Heavy — ALL BRASS CONSTRUCTION — Sturdy

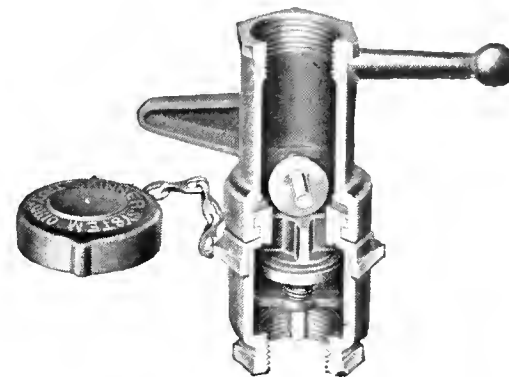
Compact design . . . mechanically correct . . . accurately machined.



Broadway Sprinkler Mounted on Self-Closing Snap Valve

**LEVER TYPE VALVE WITH LID**

No.	Inlet	Outlet	Coupler	Price
No. 20	1"	1"	210	\$4.00
No. 20-A	1 1/4"	1 1/4"	210	4.50
No. 21	1 1/4"	1"	210	5.25
No. 22	1 1/4"	1"	230	6.50
No. 22-A	1 1/2"	1"	230	6.75
No. 23	1 1/2"	1"	230	8.25
No. 24	1 1/2"	1"	240	9.50



**LEVER TYPE COUPLER**

No. 210	Internal Diameter 1"	Outlet 1"	3.50
No. 230	Internal Diameter 1 1/4"	Outlet 1 1/4"	3.75
No. 240	Internal Diameter 1 1/4"	Outlet 1 1/4"	4.75

**BAYONET TYPE VALVE WITH LID**

No.	Inlet	Outlet	Coupler	Price
No. 31	1"	1"	310	\$5.25
No. 33	1 1/4"	1 1/4"	330	8.25
No. 34	1 1/2"	1 1/2"	340	9.50



Lever Type

**BAYONET TYPE COUPLER**

No. 310	Internal Diameter 3/4"	2.85
No. 330	Internal Diameter 1"	3.00
No. 340	Internal Diameter 1 1/4"	4.50

Both Type Valves available with either Hinged or Screw type cover.

**SPRINKLER HEADS**

Pop-up type	\$3.25
Stationary	1.50
Rotary, pop-up	16.00

**SWIVEL HOSE ELLS**

1" x 3/4"	\$2.50
1" x 1"	2.75
1 1/4" x 1 1/4"	4.50
1 1/4" x 1 1/2"	5.50

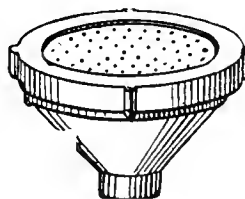


Bayonet Type

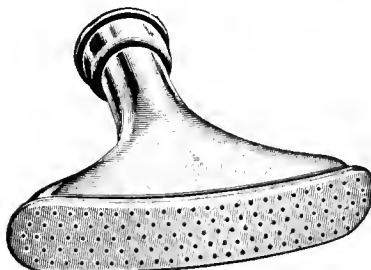
**WATERING ACCESSORIES**

**BINKS NOZZLE**

Made of aluminum, with brass face; equipped with interchangeable sprays, coarse and fine. The best and most indestructible nozzle made. \$3.00 each.

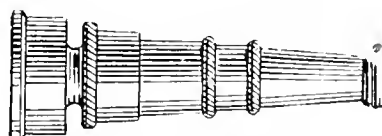


**FLARING ROSE SPRINKLER**



Ejects a fan-like spray; especially adapted for sprinkling new seeding. Price, 45c.

**GEM NOZZLE**



For 3/4 in. hose. Adjustable, from fine spray to solid stream. Price, 45c. ea.



**DOUBLE ROTARY SPRINKLER**

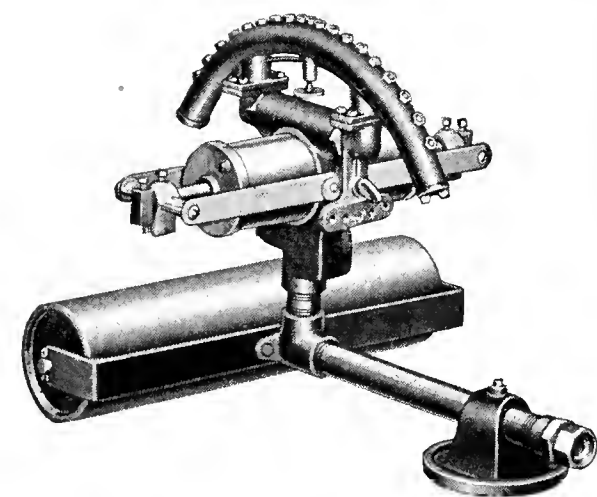
A popular sprinkler for large area watering, capable of covering an area up to 80 ft. in diameter, depending on the water pressure. Gears are of hardened steel and bronze and run in oil. The nozzle is adjustable for fine or coarse spray and permits covering large or small areas without reducing the volume. Mounted on skid base permitting moving while in operation. Price—\$12.50.

**C. B. G. SPRINKLER**

Especially for putting greens; 4 inches high. Price, 30c. ea.; \$3.00 doz.



C. B. G.



**RAIN-WAVE SPRINKLER**

A solid brass oscillating sprinkler, consisting of a sturdy water motor which slowly rocks an immense fan of water back and forth over an area approximately 50 feet square. It can be adjusted to water half, quarter or eighth of the width, length remaining constant. Its gentle spray is ideal for newly seeded greens or turf nurseries, for tees and greens where the pressure is low, and for restricted areas. Will work effectively on as low a pressure as 20 lbs., requiring only four gallons per minute. Price—\$35.00.

# PENNSYLVANIA QUALITY MOWERS

Pennsylvania Golf Mowers are the result of 60 years experience in building high grade machinery for every variety of grass and turf. The De Luxe Fairway Unit is the finest machine ever produced, mechanically correct in design and construction. Its natural set holds it close to the ground without special devices and it will cut the toughest grasses without jumping or slippage of the wheels.

**Frame**—including side plates, shield, wheels, bottom knife bar and roller brackets, made of malleable iron of high tensile strength to automobile standards—**POSITIVELY UNBREAKABLE.**

**Wheels**—17-inch diameter—2½-inch tread. Double dirt sealing ring on hub. Two Timken bearings in each wheel.

**Cylinders**—7-inch diameter—6 blades. Best grade crucible tool steel, hardened and tempered. Pennsylvania cylinders are noted for their efficiency.

**Bottom Knife**—Double raised edge—reversible. High grade chrome steel. Full set screw adjustment to take up wear on both cylinder and bottom knives until entirely worn out.

**Gears**—Machine cut from cast steel blanks. Train of three gears on both sides which perfectly balances the pull on the mower. Enclosed in dirt-proof, oil-retaining housings.

**Clutch**—Positive and simple hand clutch to throw cylinder in and out of gear. One on each side.

**Roller Brackets**—Adjustable for height of cut from ¼ to 4 inches with 16 different settings. Fitted with a new exclusive Pennsylvania designed universal single ball bearing. Dirt proof and adjustable. Absolutely removes all difficulty of former and present types of ground roller bearings, the most troublesome point on all mowers.

**Lubrication**—Individual Alemite throughout.

De Luxe Units are available in two sizes—30" and 36" cut.

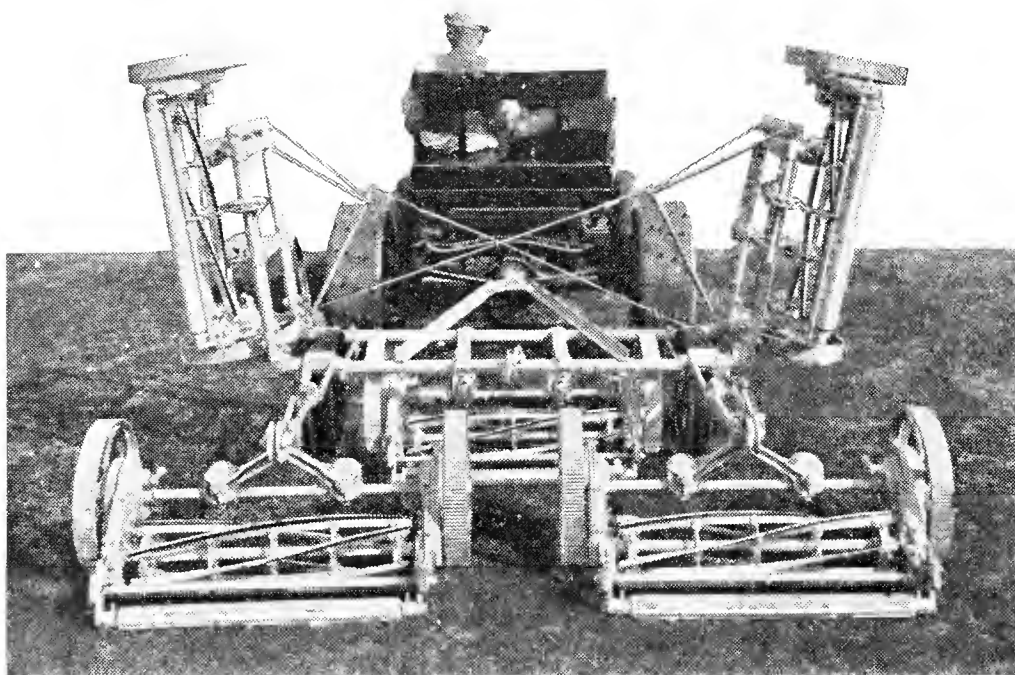


Illustration shows the PENNSYLVANIA Fairway Quint, with end Units raised to permit entering narrow gates, crossing bridges, etc. The steel frame, supported on two ground wheels, is very flexible, and practically indestructible.

The Trio, is same machine without the two end Units.

All Units are alike and interchangeable in any position. The rear of the Units can be raised and cylinders idled.

## “MODEL K” FAIRWAY UNIT

Similar in all important details of design to the “De Luxe” Unit. Frame is of cast iron instead of unbreakable malleable iron used in the more expensive unit. Of rugged construction with six crucible steel, extra wide, extra heavy blades and raised edge chrome steel lower blade. Three cut gears on both sides, dust protected, adjustable Timken roller bearings on cylinder, with Alemite lubrication throughout.

For use where less rigorous treatment is meted out to the mowers, where ordinary mowers would be satisfactory, the “Model K” will meet every requirement. Made in 30-inch size only.

30 INCH UNITS (DE LUXE AND MODEL K)					GIANT 36 INCH UNITS (WIDER CUT)		
	Width of Cut	Net Weight Pounds	Prices (with tractor hitch) De Luxe “MODEL K”		Width of Cut	Net Weight Pounds	Price with tractor hitch De Luxe only
Fairway Trio.....	7 ft. 2 in.	935	\$345.00	\$297.50	8 ft. 6 in.	1010	\$400.00
Fairway Quint.....	12 ft.	1530	585.00	510.00	14 ft. 6 in.	1660	670.00
Fairway 7-Gang.....	16 ft. 6 in.	2055	825.00	—	20 ft.	2350	940.00
Fairway 9-Gang.....	21 ft. 2 in.	2740	1060.00	—	25 ft. 8 in.	3080	1200.00
Fairway Single Unit.....	30 in.	230	105.00	87.50	36 in.	245	120.00

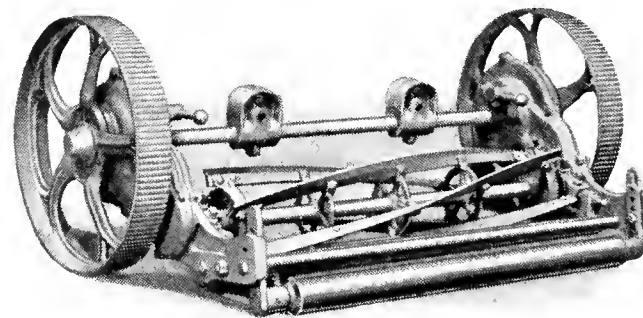
30" or 36" Trio with horse equipment (one or two horses)—\$25.00 Extra.

## PENNSYLVANIA PONY MOWER

This is a single Fairway unit fitted with a light, simple, yet durable frame, for horse pulling, and is fast displacing the old style horse mower with the heavy rollers. It is more flexible, lighter to pull, easier to handle, and will cut in places inaccessible to the older style horse mowers.

Available in both sizes of the De Luxe Unit, and in the “Model K” Unit. Specifications are the same as described above. Height of cut adjustable from ½" to 3".

- With 30" De Luxe Unit.....\$125.00
- With 36" De Luxe Unit..... 150.00
- With 30" “Model K” Unit..... 110.00

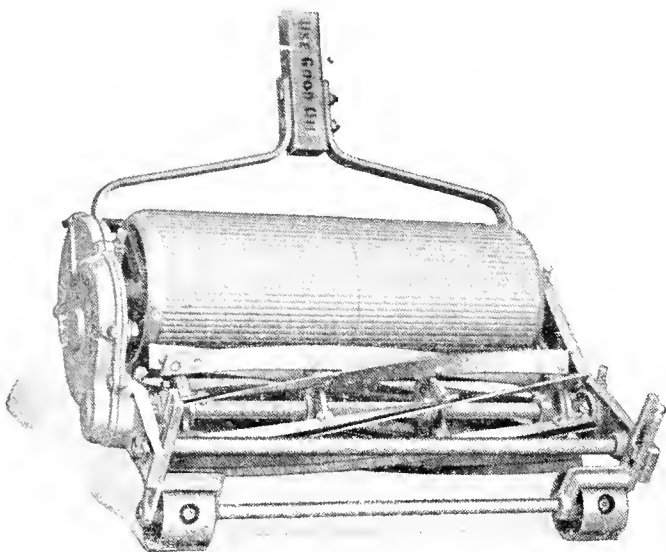


Pennsylvania Fairway Unit

Pennsylvania Fairway Units are simple in design but by comparative test of Features, Performance, Economy, Quality and Price they stand out as the greatest mower value in the field. Experienced greens-keepers regard Pennsylvania as “The Lawn Mower Standard of the World.”



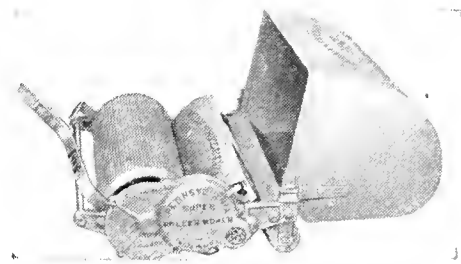
# PENNSYLVANIA QUALITY MOWERS



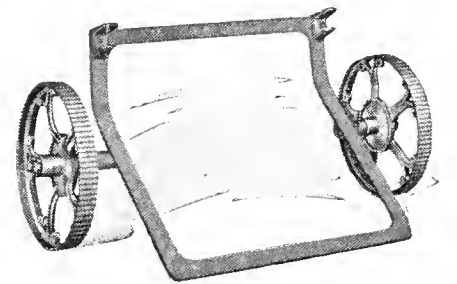
## PENNSYLVANIA SUPER ROLLER GREENS MOWER

A precision mower, designed especially for the smooth, ridgeless close cut necessary on the modern putting green. 8 blades, high speed cylinder, self-aligning ball bearings, three cut gears, triple pawls, Alemite lubrication. Driving drums are aluminum, 7 inch diameter, that give a polish after cutting. Height of cut can be regulated between  $\frac{1}{8}$  and  $1\frac{1}{8}$  inches.

The Super Roller Mower is used on many of the world's leading golf courses, including the "Royal and Ancient" at St. Andrews, Scotland, and many of the American championship courses. Net wt. 58 lbs. One size only, 18 inch, \$50.00.



All-metal Grass Box for Super Roller Mower. Net weight, 9 pounds. Price, \$6.00.

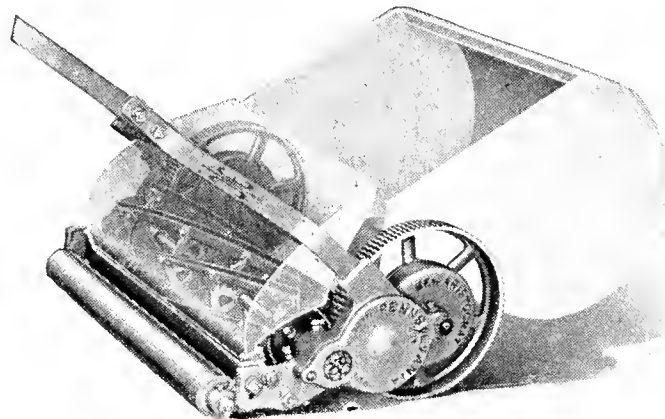


Transport Carriage for Super Roller Mower. Net weight, 19 pounds. Price, \$5.00.

## PENNSYLVANIA NEW ARISTOCRAT

The PENNSYLVANIA New Aristocrat is a still lighter-running, smoother-cutting model of the world-famous "Aristocrat" or PENNSYLVANIA "Golf," the "old-reliable" high wheel greens mower which has been used for years by greenskeepers in every country where golf is played. Its higher gearing makes it particularly efficient in cutting the modern creeping bent greens.

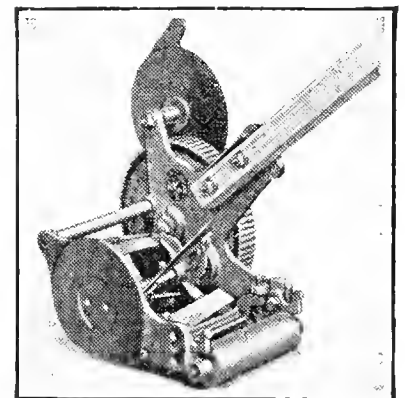
The Cylinder has 7 blades, high speed for smooth cutting, driven by a train of 3-cut gears on both sides. One size only, 19-inch, net wt. 58 lbs. . . \$36.00  
Grass Box . . . . . 6.00



## PENNSYLVANIA TRIMMER & EDGER

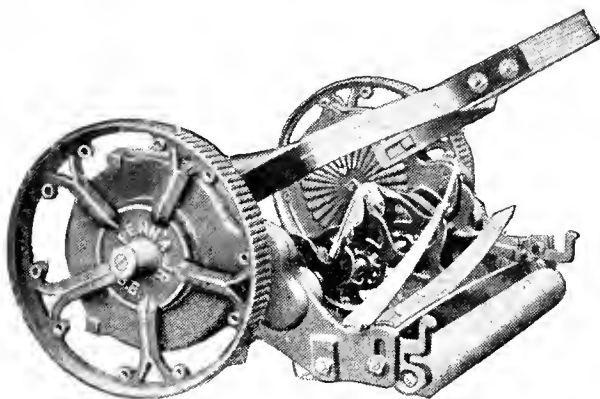
This Pennsylvania Ball Bearing Trimmer equipped with a steel disc and a small plow, will trim the overhanging grass along the edges of paths and flower beds, where heretofore, it has been necessary to use either a half-moon hoe, a grass hook or hand shears.

Handle adjustable, steel disc securely braced. Cut 6 inches wide. Price, \$9.00.



## PENNSYLVANIA JUNIOR

This is the standard mower for general trimming and is probably used on more private estates, parks, cemeteries, and golf courses than any other mower. The cylinder has 5 blades, 6 inch diameter, self-aligning ball bearing, driven by a train of 3 cut gears on both sides, double pawls, to prevent slipping. It will cut grass 6 in. high to from  $\frac{1}{4}$  to  $1\frac{1}{2}$  in. Actually self-sharpening.



High Wheel, 10" Diam.	Price
15 inch, net wt. 41 lbs. . . . .	\$19.00
17 inch, net wt. 43 lbs. . . . .	20.90
19 inch, net wt. 45 lbs. . . . .	23.75
21 inch, net wt. 48 lbs. . . . .	26.60

Low Wheel, 8" Diam.	Price
12 inch, net wt. 38 lbs. . . . .	13.75
14 inch, net wt. 39 lbs. . . . .	15.65
16 inch, net wt. 41 lbs. . . . .	17.60
18 inch, net wt. 43 lbs. . . . .	19.95

## FOR TEES AND BENT GRASS LAWNS

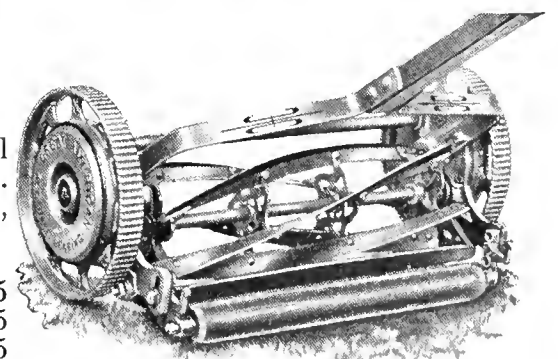
A special Pennsylvania, Jr. Mower, low wheel pattern, rubber tires and equipped with a 6 blade cylinder which is especially adapted for tees, approaches and the private lawn planted with creeping bents of various types. It will push easily and cut cleanly.

One size only—18 inch. Price, \$25.00.

## SUPER GREAT AMERICAN

As a general utility mower for cutting bunkers, etc., this is unexcelled. It is driven by an internal gear and pinion on each side, and is the easiest pushing, best running mower made. The 6 in. cylinder has 5 blades, self sharpening, with self-aligning ball bearings. Wheels are 10-inch diameter, mounted on ball bearings. Adjustable to cut from  $\frac{1}{2}$  to  $1\frac{1}{2}$  inches high.

	Price
15-inch, net wt. 38 lbs. . . . .	\$16.15
17-inch, net wt. 40 lbs. . . . .	18.05
19-inch, net wt. 42 lbs. . . . .	19.95
21-inch, net wt. 45 lbs. . . . .	21.85

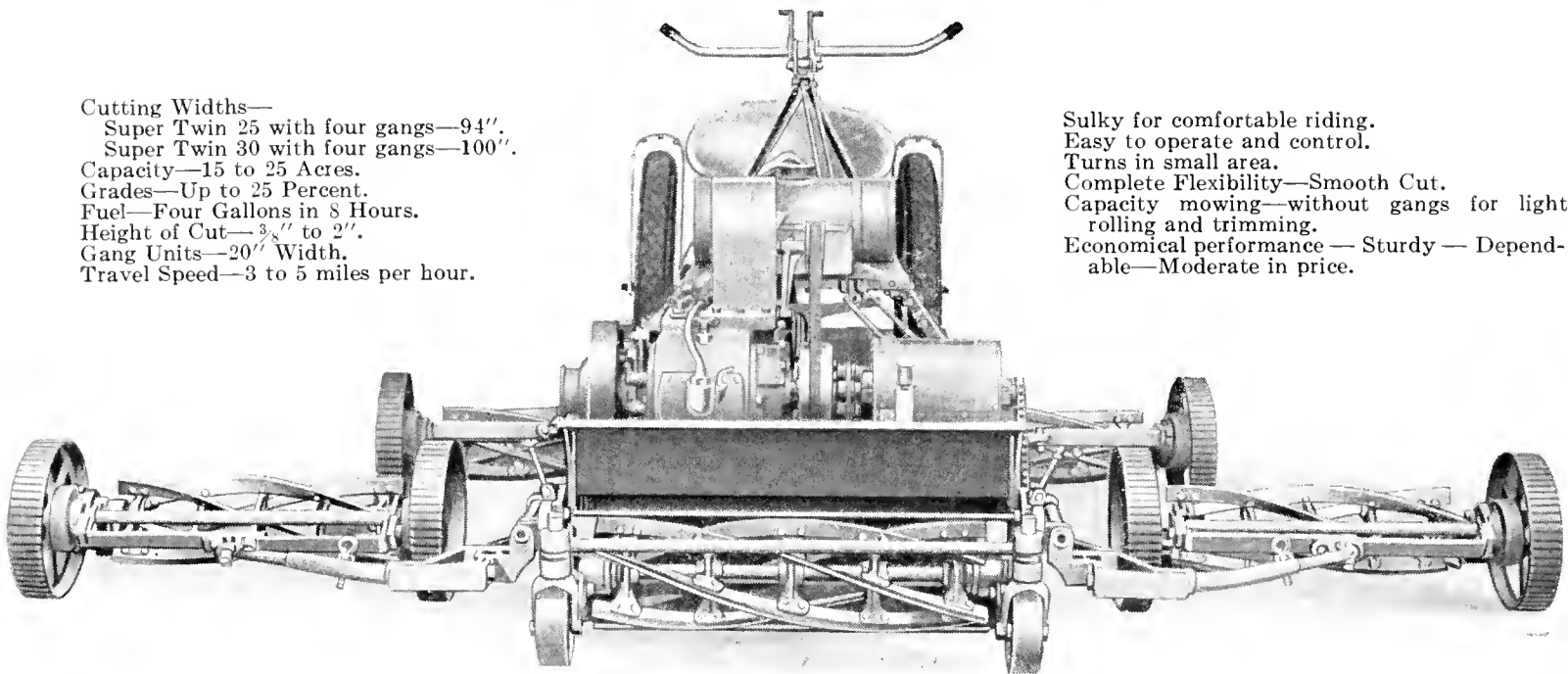


Super Great American

# SINCE 1867 COLDWELL POWER LAWN MOWERS

Cutting Widths—  
 Super Twin 25 with four gangs—94".  
 Super Twin 30 with four gangs—100".  
 Capacity—15 to 25 Acres.  
 Grades—Up to 25 Percent.  
 Fuel—Four Gallons in 8 Hours.  
 Height of Cut— $\frac{3}{8}$ " to 2".  
 Gang Units—20" Width.  
 Travel Speed—3 to 5 miles per hour.

Sulky for comfortable riding.  
 Easy to operate and control.  
 Turns in small area.  
 Complete Flexibility—Smooth Cut.  
 Capacity mowing—without gangs for light  
 rolling and trimming.  
 Economical performance — Sturdy — Depend-  
 able—Moderate in price.



"Super Twin" With Four Gangs and Sulky

**F**ROM the most complete line of power mowing equipment, Coldwell can furnish a model to suit every need and every budget. The accumulated experience of thirty-five years of power mower building is reflected and built into every Coldwell machine. Each model and accessory has been exhaustively field-tested, to best cope with specific turf conditions.

## SPECIFICATIONS

**General**—Coldwell Power Mowers are roller driven, with dual control chain drive providing independent power to drive roller for traveling and to the cutting unit for mowing. Governor can be set at three separate speed positions to maintain constant speed at low, medium and high. Hand throttle controls acceleration at various speed positions. Frame of structural steel, electric arc welded.

**Engine**—Completely made by Coldwell. Four cycle, water-cooled by radiator and fan. Tillotson Carburetor with air cleaner; Bosch fly-wheel type Magneto; Oil pump for lubrication; Steel-forged Crankshaft carried on Timken Roller Bearings; Connecting Rod Bearings of die-cast babbit; Chrome Nickel Alloy Steel Valves; Semi-Steel Pistons; Three speeds and Throttle. *Super Twin Engine* develops a Brake Horsepower of 3.2 at 1200 R.P.M. or 5½ H.P., N.A.C.C. Rating; *Single Cylinder* develops 1.6 H.P. at 1200 R.P.M. or 2¾ H.P., N.A.C.C. rating.

**Transmission**—Enclosed in Metal Housing. Closed Type, self-adjusting spring loaded with cone friction. Clutches lined with Asbestos replaceable brake lining. Dual control provides independent power through the chain drive to Revolving Cutter and to Drive Roller.

**Drive Rollers**—Two section, full width, with corrugations cast in. Equipped with differential to prevent marring turf when turning. Pinions and Gears of steel forgings beveled and cut, completely enclosed in dirt proof housing. Can be furnished rubber-covered.

**Cutting Unit**—Full Floating, demountable front with sectional guard roller, fastened to the steel channel frame by push arms; adjustable caster rollers in front of the cutting unit can be regulated for various heights of cut; pivots freely and conforms readily to uneven surfaces. The Revolving Cutter (five or seven blades) is engine driven to assure an even, smooth cut; blades are fastened to double-edged flanges; shaft revolves on double row ball bearings. Both revolving cutter blades and bottom knife are heat-treated and oil-tempered.

## SUPER TWIN CYLINDER MODELS

The Super Twin Mowers house an abundance of power, are designed for large areas, and are particularly suited for the job of mowing, rolling and trimming when capacity performance at the very minimum of time and expense is required. Cutting widths of 25" to 30" are available with a mowing capacity of 4 to 7 acres per day. Will travel grades up to 45 per cent, and has a regular traveling speed of 2 to 5 miles per hour. Two gallons of fuel are sufficient to operate the machine for 8 hours. Tremendous power and traction makes possible larger width of cut by the addition of extra cutting units, as shown above. Grades offer no difficulty and with the sulky attached, the operator as well, may be transported.

"Super Twin Thirty"—30" cut.....\$385.00  
 "Super L Twin"—25" cut..... 335.00

## SINGLE CYLINDER MODELS

Similar in most respects to the "Super Twin" but of slightly lighter construction, and naturally, with a lower power range, Coldwell single cylinder mowers are ideal for the small and medium sized area where the demand for unusual power will not be encountered. Single cylinder mowers have a cutting capacity of two to seven acres per day depending on width of cut. One gallon of fuel per ten hours is sufficient to operate a single cylinder model at a traveling speed of 2 to 4 M.P.H.

"Junior Thirty"—30" cut.....\$300.00  
 "L Junior"—25" cut..... 260.00  
 "Coldwell Cub"—21" cut..... 215.00  
 "Country Gentlemen"—A entirely new and superior low-priced mower especially designed for work in cemeteries, trimming in parks, and work on grass areas not more than an acre in size. This mower embodies all the fine features of the larger machines. Capacity 1½ to 2½ acres per day. Width of cut 21 in. Choice of wheel or roller drive.  
 With steel traction wheels 3¼" wide.....\$167.50  
 With iron roller..... 182.50  
 Special 25" cut, with iron roller only..... 231.00

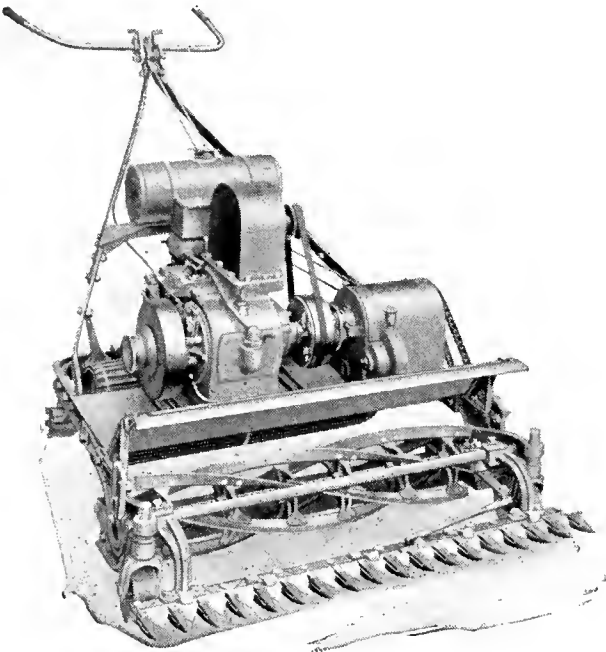
Any of the above models can be furnished with the *De Luxe* equipment, consisting of four pneumatic-tired drive wheels instead of the standard iron roller, also, pneumatic tired caster wheels, or the *Rubber Roller Model*, with rubber-covered drive rollers and caster rollers, at a slight additional cost.

## ACCESSORIES FOR COLDWELL POWER MOWERS

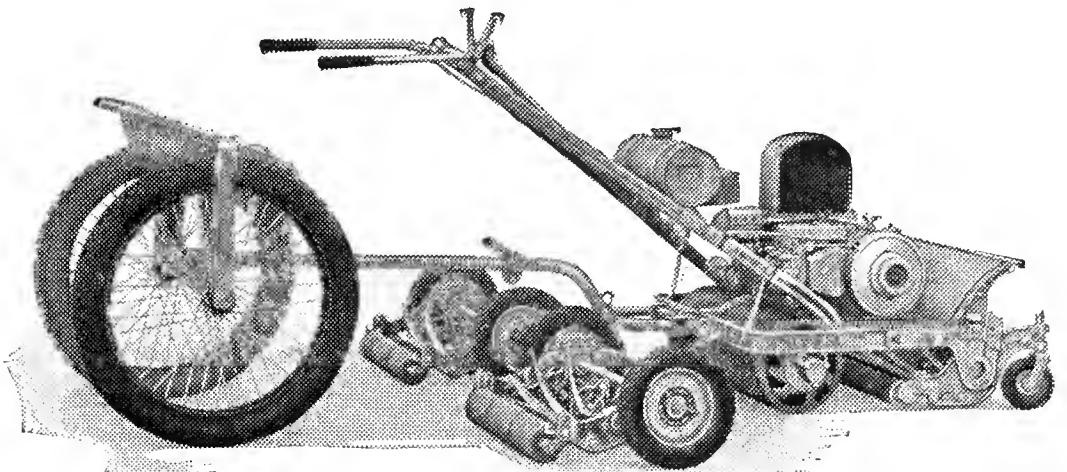
To provide maximum efficiency and utmost satisfaction, Coldwell has developed extra equipment for use with Coldwell Power Mowers, which covers completely every problem in connection with large area cutting of turf. These accessories are listed below, and we will be pleased to furnish prices upon request.

### THE SICKLE BAR

This attachment is designed to cut unusually high grass and such weeds as pliantain, buckhorn and dandelions that are regularly found growing even in well-established lawns, assuring an even, smooth cut. The Sickle Bar is so designed that it can be easily attached and readily removed. It is *power driven* and works simultaneously with the revolving cutter. Knives can be adjusted to cut from 2 to 5 inches high, and are removable for sharpening. Can be furnished in 21", 25" and 30" widths.



"Super Twin" with Sickle Bar attached



"Super Twin" Rubber Roller Model with Sulky and Gang Units

### THE GANG UNIT

The sturdy gang unit is designed to produce an even, smooth cut. It can be readily adjusted for varying heights of cut and is available in 16" and 20" width. Two wide faced wheels connected through three special hardened malleable gears, in dirt proof housing, furnish power to the revolving blades. Gang units can be furnished with pneumatic wheels. Gangs are furnished in sets of four or two complete with hitch. Prices will be quoted on request.

### THE ELECTRIC GRASS TRIMMER AND HEDGE CUTTER

By using the Electric Generator which can be attached to any Coldwell Power Mower, it is possible to use electrically driven tools such as the Hedge Cutter and Grass Trimmer. Complete information will be furnished on request.

### THE GRASS BOX

Made entirely of heavy gauge sheet steel, with deflector. It is of large capacity, easily attached, loads evenly and is quickly detached for emptying by means of handles on each side. Made to fit all Coldwell Super Twin and Single Cylinder Mowers.

### THE RIDING SULKY

Sturdily constructed throughout. Steel rim wheels with wire spokes, mounted with pneumatic tires. Equipped with ball bearings running on a hardened shaft. It has an adjustable foot rest and a comfortable seat. Made in two sizes:—

Heavy Duty, 26" dia. wheel. For Super Twin Mowers.

Light Duty, 20" dia. wheel. For Single Cylinder Mowers.

## TRACTOR ROUGH MOWER

An improved field type mower for cutting the rough on golf courses and other areas where close cutting is not necessary. This machine is designed especially for use with a tractor and is built to stand the higher speed necessary. The entire driving mechanism including the differential is fully enclosed and runs in a bath of oil, reducing wear on the gears and bearings and minimizing noise and vibration. Equipped with pneumatic rubber tires 4.75 x 21 for greater traction and comfort. Cutter bar is 6 ft. long, oil tempered and heat treated, resisting bending and sagging strains. It may be raised when not in use, or to lift over obstacles, by means of an easily operated tilting lever. Approximate weight 860 lbs. Furnished complete with tractor hitch and two knives. Price, \$175.00.

## LAWN MOWER OIL



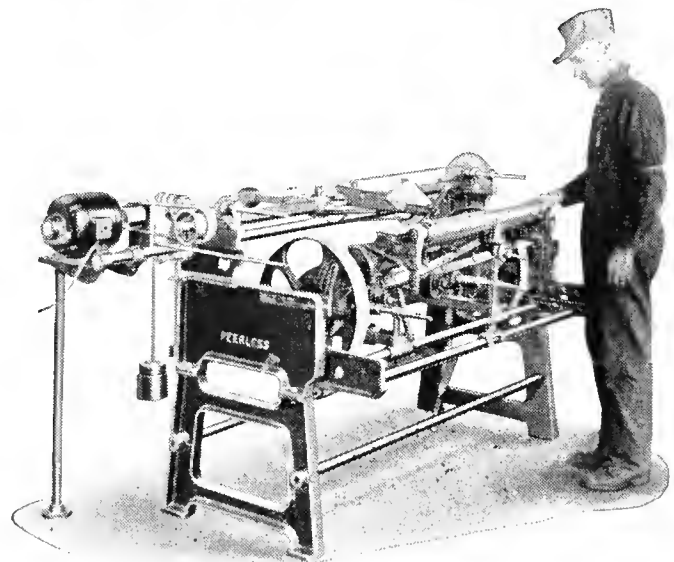
Pure oil that will not gum or get sticky is an essential for the satisfactory operation of every mower. The oil sold by us has been selected with this point in view.

Prices: Per pint, 25c.; 35c. per quart; per 1/2 gal., 65c.; \$1.00 per gal.; 5 gals., \$4.00.

## EMERY

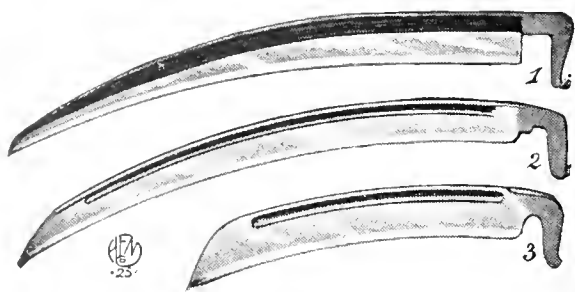
For sharpening Lawn Mowers. Price, 20c. per lb.; 10 lbs., \$1.50.

## PEERLESS MOWER SHARPENER



No. 236

A high grade Mower Sharpener at a very low price. Grinds all makes of power mowers and tractor units up to 36" wide, as well as putting green and hand lawnmowers. Very fast and accurate. Equipped with Reconditioner for "lapping in" with emery paste; Attachment Bar for grinding badly worn straight blades, and Special 10" Grinding Wheel for grass and hedge shears, sickles, scythes, etc. Equipped with 1/2 H.P. G. E. motor, \$222.50. Without motor for belt drive, \$187.50. Prices f.o.b. Plymouth, Ohio.



Key to illustration: No. 1, English; No. 2 American; No. 3, Little Giant Brush.

**SCYTHES**

- Little Giant, 32-inch.....\$1.75
- Little Giant, 34-inch..... 1.75
- Little Giant, 36-inch..... 1.75
- Little Giant Brush or Briar..... 1.90

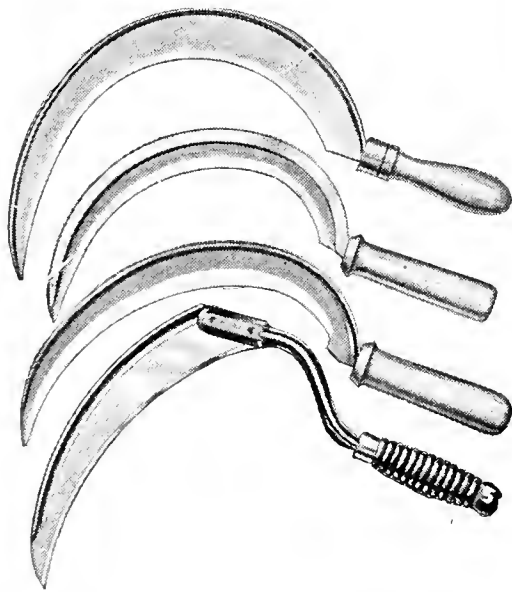
The Little Giant is the best American-made scythe for field and heavy grass work.

- English, 32-inch, rivet back.....\$2.50
- English, 34-inch, rivet back..... 2.75
- English, 36-inch, rivet back..... 3.00

The English Scythes are best for fine grass or lawn work.

**SCYTHE HANDLES**

- No. 50. Made of hard wood, well finished. Regular Scythe style.....\$1.75
- Snath Clips..... .25



**SICKLES**

The listing below corresponds with the order in which the sickles are illustrated.

- Dutch or German, No. 2.....\$0.65
- English Rivet Back, No. 2..... .90
- English Rivet Back, No. 3..... .90
- English Solid Back, No. 2..... .65
- Little Giant..... .60



**SCYTHE STONES**

- |                               |        |        |
|-------------------------------|--------|--------|
|                               | Each   | Doz.   |
| Sir Pike (Talacre Style)..... | \$0.25 | \$2.75 |
| Darby Creek.....              | .20    | 2.25   |
| Carborundum. Very fine....    | .25    | 2.75   |



No. 1102

No. 1104

**BORDER SHEARS**

Indispensable for trimming overhanging grass around flower beds and walks.

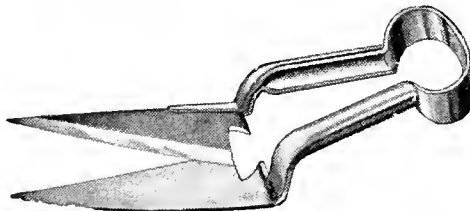
- No. 1102. 9-inch. Without wheel... \$3.50
- No. 1103. 9-inch. With one wheel... 4.00

**LAWN SHEARS**

For trimming under shrubbery, fences and other out-of-the-way places. The two wheels permit the shears to move over the ground freely, backward and forward.

- No. 1104. 8-inch blade, long handle... \$3.50
- Handles for Border Shears (per pair)... 1.00

**GRASS SHEARS**

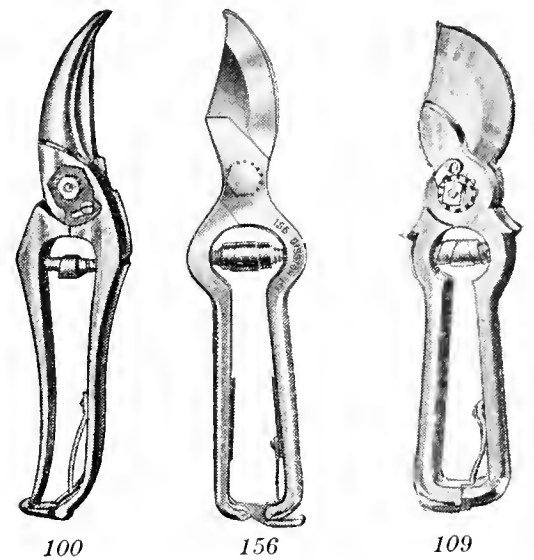
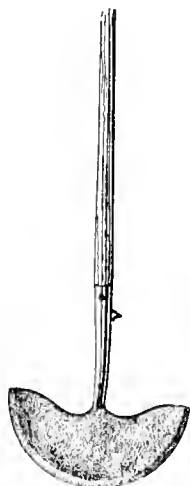


- |       |                                   |        |
|-------|-----------------------------------|--------|
| No.   |                                   | Each   |
| 235.  | 6-inch, American.....             | \$0.45 |
| 012.  | 6-inch, American.....             | 1.20   |
| 114.  | 7-inch, English, trowel shank...  | 2.35   |
| 113.  | 7-inch, English, straight handle. | 1.90   |
| 0267. | 5½-inch, American.....            | .80    |
| 0267. | 7-inch, American.....             | 1.10   |

**EDGING KNIVES**

For trimming edges of paths, etc. No other implement will put a finish to a grass border, a walk or drive edged with sod like an edging knife.

- No. 040. American, with handle.....\$1.15
- No. 3863. English, 9-inch with handle.....\$2.25



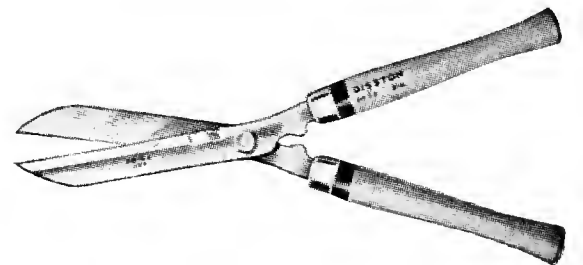
100

156

109

**PRUNING SHEARS**

- |      |                |        |        |
|------|----------------|--------|--------|
| No.  |                | Length | Each   |
| 100  | Michell.....   | 9 in.  | \$3.75 |
| 156  | Disston.....   | 8½ in. | 2.50   |
| 136  | Disston.....   | 9 in.  | 1.15   |
| 5945 | Elbersmit..... | 9 in.  | 2.50   |
| 109  | Wiss.....      | 8 in.  | 3.00   |



**HEDGE SHEARS**

Disston and English Shears have full length wooden handles as illustrated, Wiss handles are of drop forged steel with wooden grips.

- |              |         |         |        |
|--------------|---------|---------|--------|
|              | Disston | English | Wiss   |
| 8 inch.....  | \$2.25  | \$3.25  | \$2.50 |
| 9 inch.....  | 2.50    | 3.50    | 3.00   |
| 10 inch..... | 2.75    | 4.00    | 3.25   |
| 12 inch..... |         | 5.00    |        |

Bolts and Nuts for hedge shears, 30c.  
Handles for Hedge Shears, 90c. per pair.



Trims hedges 10 times faster.

AND IT'S FUN... NOT WORK.

Operates from any ordinary light socket; cuts a clean, perfect swath through the toughest hedge growth. Trims 100 ft. of hedge, top and sides in 30 minutes.

The most powerful electric hedge trimmer; weighs only 6 lbs. Thousands of satisfied users everywhere say that ELECTRIMMER is the finest, strongest, most practical hedge cutter ever produced... and many state that it saves so much over slow costly hand labor it PAYS FOR ITSELF IN A SINGLE SEASON.

- Complete with 8 ft. cord.....\$27.00
- 100 ft. best quality 18 ga. ext. cord... 3.50
- 200 ft. best quality 16 ga. ext. cord... 8.50

**TREE PRUNERS**



**LITTLE GIANT**

As illustrated... \$2.75  
Without saw.... 2.00

Pole not included.

No. 111—Adjustable pole pruning saw. Blade may be set at different angles. Price, without pole.....\$1.75

**Poles for Tree Pruners**

12 feet long, 1½-inch diameter.....\$1.90  
14 feet long, 1½-inch diameter..... 2.25

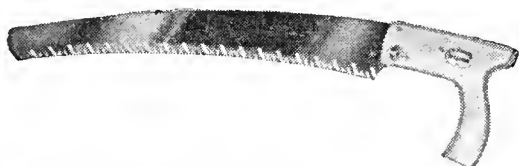
**DISSTON PRUNING SAWS**



No. D27—A superior Saw for tree-surgery work. Steel blade 6 in. wide at butt; 1¼ in. at the point; 26 in. long; hardwood handle.....\$3.25  
No. 4. 18-inch. Double edge..... 1.30  
No. 4. 20-inch. Double edge..... 1.35  
No. 7. 16-inch. Single edge..... 1.20  
No. 7. 18-inch. Single edge..... 1.25  
No. 7. 20-inch. Single edge..... 1.35  
No. 5. 20-inch. Double edge, curved blade..... 1.35

**SPEED SAWS**

A patented Saw with new-design teeth in groups of 2 slicer teeth and one planer tooth. Made of the best rust-resisting steel, in excellent finish.



TR No. 1. Detachable handle. Can be used with Pole Pruner. 16-in. blade.....\$2.80



TR No. 3-14. 26-in. cut.....\$3.25

**CROSS CUT LOG SAWS**

Disston Make

No. 554 Champion, one-man, 3 ft. blade.....\$3.25  
Gt. American, two-man, 5 ft. blade... 5.00

**CARPENTER SAWS**

State if rip or cross cut is wanted  
Disston No. 8D. 26-inch blade.....\$2.50

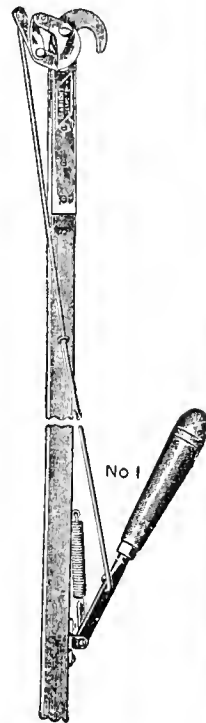
**TREE TRIMMERS**

**Bartlett** (illustrated). Has a compound lever head, and is made with a hook and side lever. Will cut a limb up to 1¼" diameter.

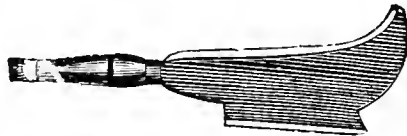
**Clyde**. Similar in design to the Bartlett, but of simpler construction without compound head.

**PRICES**

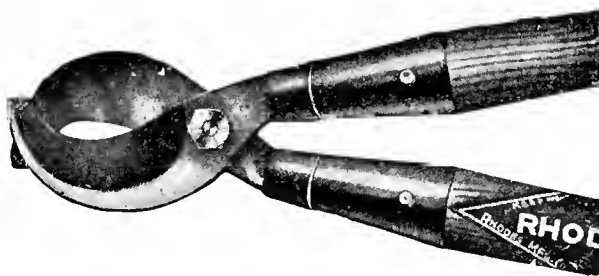
	Bartlett	Clyde
6 ft.....	\$5.25	\$1.75
8 ft.....	5.50	2.00
10 ft.....	6.00	2.25
12 ft.....	6.25	2.50
14 ft.....	6.75	2.75
16 ft.....	7.00	



**ENGLISH BILL HOOKS**



For trimming heavy shrubbery, trees, etc.  
Short Handle.....\$2.00  
Long Handle..... 3.25



**RHODES LOPPING SHEAR**

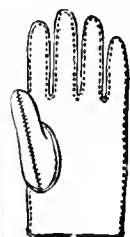
Makes an absolutely clean, perfect cut; the blades are concaved at the cutting edge, producing with the handles an enormous leverage. The easiest operating Lopping Shear ever made. 26-inch and 30-inch handles. Price, \$3.25.



**FORESTER LOPPING SHEARS**

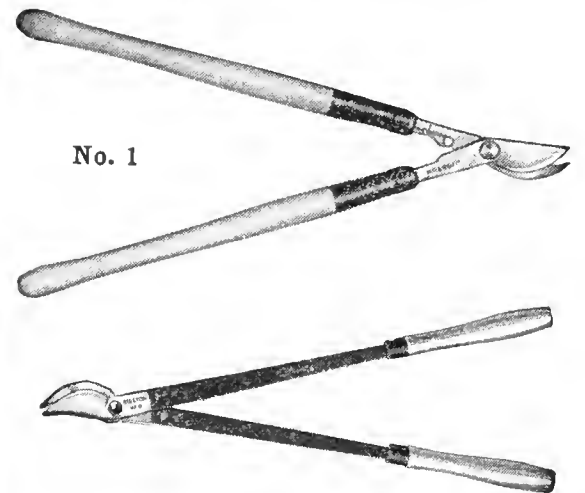
A powerful and ruggedly built shear; has patented slide-shift power slot.  
No. 1. 20 inches long; capacity, 1¾ inches; weight, 2 lbs., 10 ozs. Price, \$4.75.  
No. 2. 27 inches long; capacity, 1½ inches; weight, 4 lbs., 10 ozs. Price, \$5.50 each.

**LEATHER GLOVES**



Pair  
No. 225. Horsehide, with gauntlets, not lined.....\$2.75  
No. 280. Horsehide, with gauntlets, lined..... 1.70  
No. 228F. Horsehide, no gauntlets, not lined..... 2.25

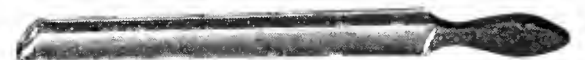
**DISSTON LOPPING SHEARS**



**No. 1. Disston Lopping.** Polished hardwood handle, 20 inches long; 27½ inches over all; heavy ferrule; heavy blades for heavy work; weight, 3¼ lbs. Price, \$2.75.

**No. 3. Disston Bull Dog Lopping.** Both jaws curved and both cutting jaws; weight 3½ lbs. Price, \$2.50.

**No. 7.** Cuts 1½-inch limbs with ease; 24 inches long. Price, \$3.00.



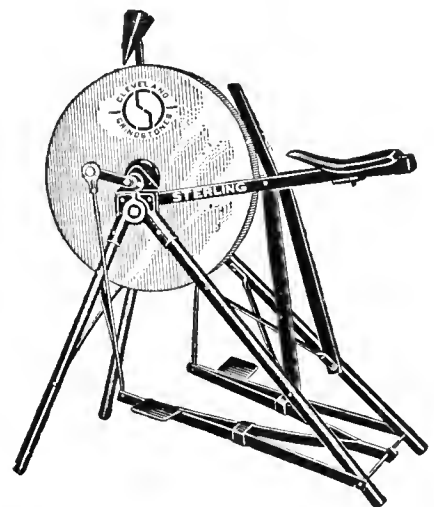
**CARBORUNDUM RIFLE**

Price, 25c. each.



**CARBORUNDUM FILES**

Price, 90c. each.



**STERLING MOUNTED GRINDSTONE**

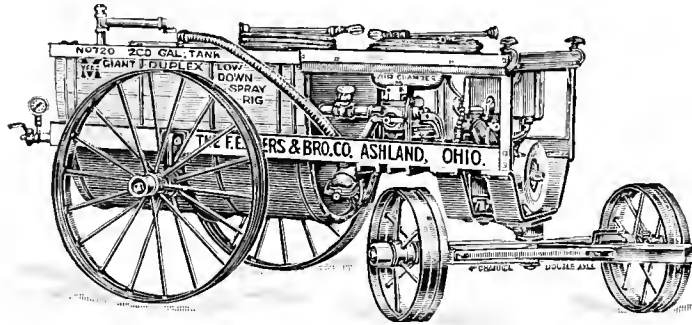
Substantially made; heavy steel frame with seat and double treadles; fitted with improved ball bearings of the very best quality, encased so they will keep clean. Stone, 19 to 22 inches diameter, 1¾ to 2¼ inches thick. Weight, 100 lbs.

Shipped knocked down, crated. Price, \$11.50.

### MYERS SPRAYERS

The different types of Myers Sprayers appearing on this page have been selected by us for our trade because of their general adaptability for golf course or other spraying. They are ideal for applying liquid fertilizers, insecticides and other spraying mixtures. They are built to the finest of mechanical standards and are famous for their durability, speed, economy and high efficiency. Having many outstanding engineering features and a host of other practical improvements they do a spraying job second to none—a job that is instantly appreciated by those of experience as well as by those who spray for the first time.

## MYERS GIANT DUPLEX POWER SPRAY RIG



This Rig is equipped with 2 1/2" x 2 1/2" Self-Oiling Duplex High Pressure Pump—350 to 500 pounds and has 200 gallon Cypress Tank with Rotary Agitator, all steel Short Turn Truck, 4 HP or 6 HP Engine and complete equipment including two guns, hose, pressure gauge, rotary agitator, sediment chamber, pressure controller and unloading valve, chain and sprockets ready to spray. Capacity is from 8 to 12 gallons per minute. Complete automatic control, dust and dirt proof construction, perfect and continuous lubrication assure users utmost service at minimum cost.

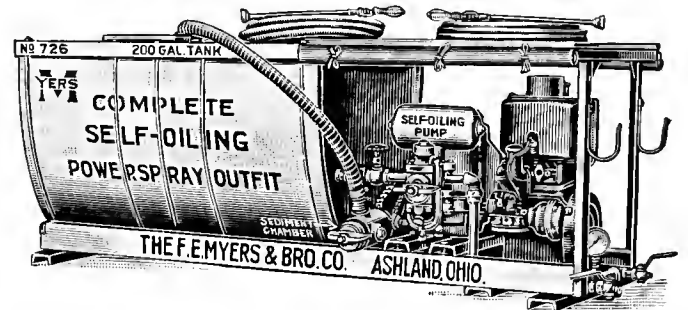
troller and unloading valve, chain and sprockets ready to spray. Capacity is from 8 to 12 gallons per minute. Complete automatic control, dust and dirt proof construction, perfect and continuous lubrication assure users utmost service at minimum cost.

Price List

- No. 720X. Completely equipped as above with 4 HP Engine.....\$560.00
  - No. 720X. For 500 lb. pressure with 6 HP Engine..... 666.00
  - Six-Inch Tires on Rear Wheels (5" Face Regular) add..... 4.00
  - Complete with 5.00 x 16 front and 6.00 x 16 rear, 4-ply implement rubber tires, tubes and roller bearings, add..... \*90.00
- \*This price is subject to change without notice.

### MYERS PARK SPRAYER

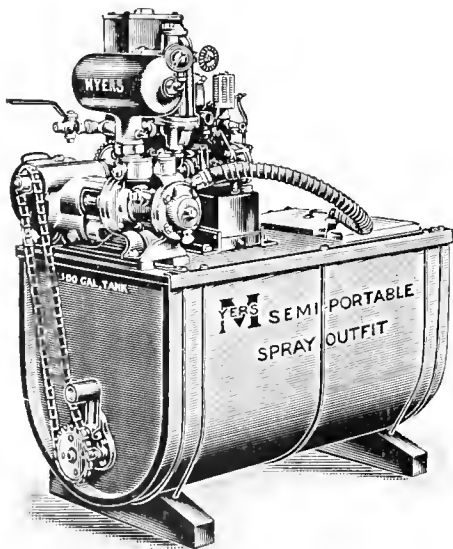
This Myers Power Spray Outfit, fully equipped and ready for service is one of the most satisfactory outfits of its type now on the market. Compactly built and quality equipped, it can be quickly and easily mounted on truck or wagon gears for transportation from place to place. Equipment includes 2 1/2" x 2 1/2" Duplex Self-Oiling High Pressure Pump, 200 Gallon Cypress Tank, Pressure Unloading Valve, Guns, Hose, Cut-Offs, Pressure Gauge, Rotary Agitator, Sediment Chamber, Pressure Controller and Unloading Valve, Chain and Sprockets, ready for service. If you prefer an outfit of this type, this one will please you with the results it produces.



Price List

- No. 726X. Complete as illustrated and described and equipped with 4 HP Engine..... \$442.00
- No. 726X. Same as above but with 6 HP Radiator Cooled Engine for 500 lbs. pressure..... 548.00

### MYERS SELF-OILING, SEMI-PORTABLE SPRAY OUTFIT



Among landscape gardeners, golf course superintendents, country estate and small orchard owners, the need for a semi-portable sprayer such as the one we illustrate is widespread. Whether used as a stationary plant, or placed on a truck or other conveyance for transportation from place to place, it will do your spraying as you desire it done, economically and satisfactorily.

It is completely equipped with engine or motor, 100 gallon cypress tank, self-oiling pump, rotary agitator, pressure gauge, lever cut-off, high pressure hose with fittings, spray gun, chain and sprockets for engine, or V-Belt pulley for motor. Capacity 5 to 8 gallons. Pressure up to 300 lbs.

Price List

- No. 789. With 2 HP Engine, chain drive, equipped as above.....\$245.00
- No. 789 1/2. With 3 HP Engine, otherwise same as above..... 277.00
- No. 794. With 1 1/2 HP, 110-220 Volt, 60 Cycle, Single Phase, A.C. Motor, V-Belt Drive. 230.00
- No. 794 1/2. Same as No. 794 but with 2 HP Motor..... 253.00

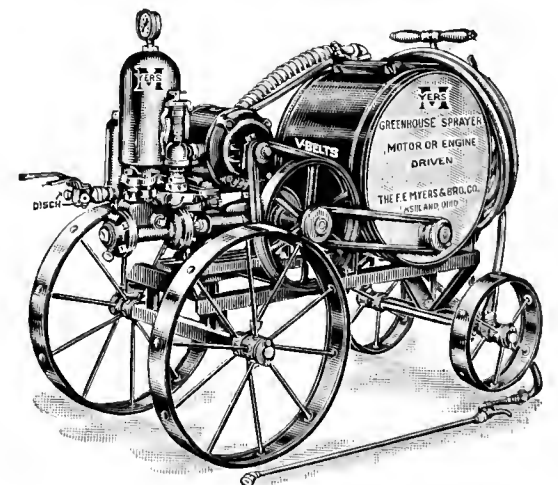
### MYERS SELF-OILING GREENHOUSE SPRAYER

Here is an outfit that greenhouse operators, nurserymen, small estate owners and many others have been looking for. Completely equipped for high pressure spraying or whitewashing with ample capacity, its wide adaptability to do many spraying jobs well is of exceptional value to anyone who has need for this type of sprayer.

Equipment includes self-oiling pump, 25 gallon tank, short turn trucks, arc-welded angle steel frame, rotary agitator, hose, brass extension, 45 degree nozzle, pressure regulating valve, pressure gauge, double lever cut-off and fittings complete ready to spray. Capacity 5 to 8 gals.

Price List

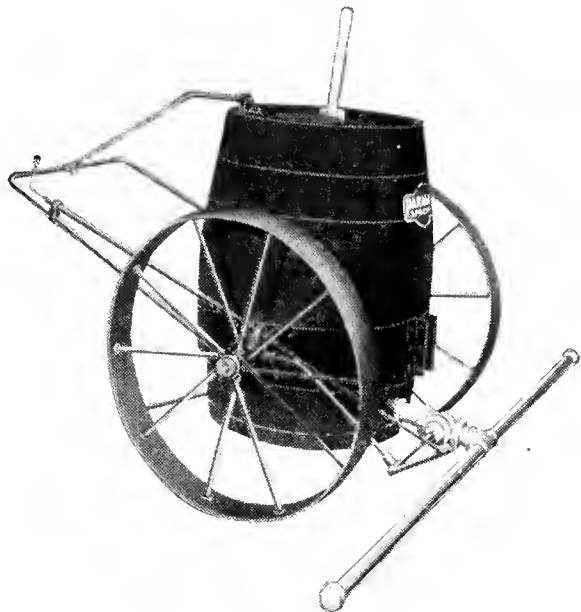
- No. 800. With 3/4 HP Repulsion-Induction Motor.....\$175.00
- No. 801. With 1 HP Full Power High Speed Air Cooled Engine..... 200.00



PRICES QUOTED ON THIS PAGE ARE F.O.B. ASHLAND, OHIO

ALL PRICES SUBJECT TO MARKET CHANGES

# PARAGON SPRINKLING CARTS AND SPRAYERS FOR THE GOLF COURSE



*Paragon Sprinkling Cart*

## PARAGON SPRINKLING CART

Greenskeepers will find this cart one of the most useful implements around the course. It can be used for applying liquid fertilizer, fungicide, weed killer and worm killer, and is especially desirable for spraying weed killer on the road-ways and by-paths. The outfit consists of a 50-gallon capacity barrel, and has a sprinkling arm 72 inches long. The barrel can be removed from the truck. The barrel is mounted on a steel band 6 inches wide and one-eighth inch thick. The casting for the wheel axles are mounted on this steel band and not through the barrel staves. This construction eliminates at least six possible chances of leakage, and it also eliminates weakening of the barrel by drilling holes through the barrel staves. It has wheels 30 inches in diameter with 4-inch tread so that it will not mark the turf. There is also an agitator in the barrel to keep the solution mixed. The location of the push handles on the Paragon Sprinkling Cart make it much easier to push the sprinkler from place to place. The handles are in a very convenient position, the lever for controlling the stop-cock is in a convenient location and very easily operated so that the flow of the solution is under control at all times. It will cover 1000 square feet with 50 gallons of solution.

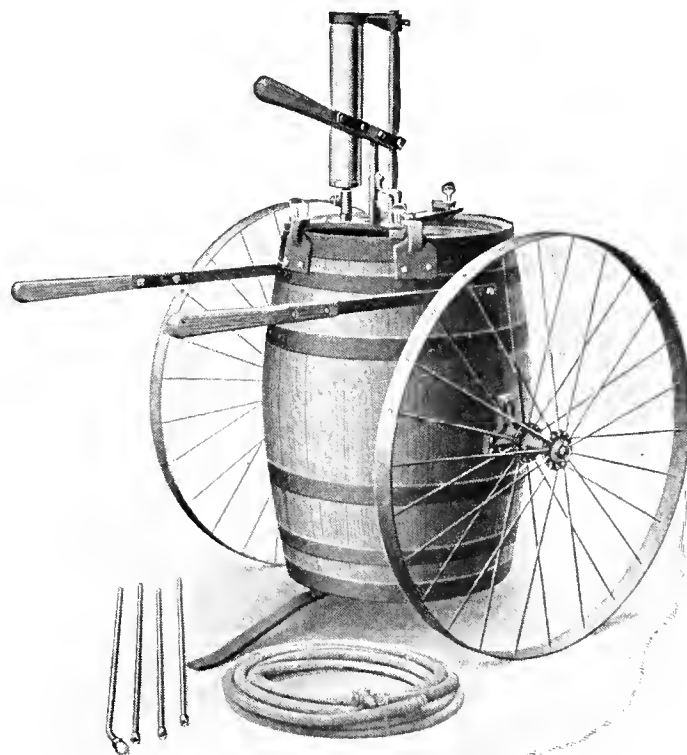
Price complete . . . . . \$37.50

## PARAGON SPRAYER No. 4

This sprayer is one of the most satisfactory of the medium size sprayers manufactured, and the greenskeeper will find many uses for it on the golf course. This sprayer is mounted on steel wheels, and has a capacity of 30 gallons, and besides the many uses to which this sprayer can be put to, one of the most important is the fact that it will spray white-wash and cold water paint, and is especially desirable for the reason that it is not necessary to strain the material before putting it into the barrel although we recommend that this is done.

The outfit comes complete with 20-feet of special spray hose, 10-ft. steel spray pipe, 1 Mist Spray Nozzle, 1 Straight Spray and 1 extra Steel Cap.

Price complete mounted on wheels . . . . . \$33.00  
Price without the wheels or handles . . . . . 27.00



*Paragon Sprayer No. 4*

## PARAGON SPRAYER No. 5

50-gallon capacity without wheels or handles . . . . . \$38.00



*Paragon Sprayer No. 3*

## PARAGON SPRAYER No. 3

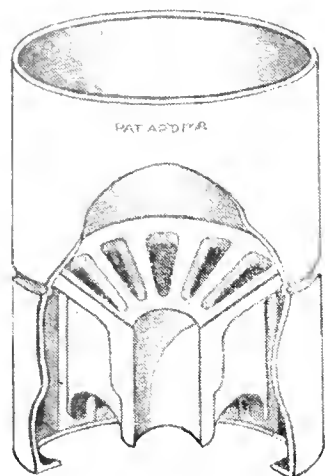
For the greenskeeper who has only a small amount of spray work to do this machine answers the purpose. It has a capacity of 12 gallons, and is just the thing needed to disinfect and spray barns and stables, and is a wonderful machine for white-washing fences, stone-walls, and smaller buildings. The construction of the No. 3 Sprayer and extra large air chamber insures a constant spray at high pressure.

The equipment is a steel tank and a 2-wheel truck, 10-ft. of special spray hose, 7½-ft. steel extension pipe, 1 brass Mist Spray Nozzle, 1 brass Straight Nozzle, 1 Steel Spray Nozzle for white-wash and cold water paint.

Price complete with truck . . . . . \$19.00  
Without truck . . . . . 15.50  
Paragon Sprayer No. 1, 6-gallon capacity, furnished without truck . . . . . 14.00  
Paragon Sprayer No. 0, 3½-gallon capacity, bucket type . . 10.00  
Complete circular on request.

**HOLE CUPS**

"PERFECT"



Made entirely of aluminum with centers to fit spike or ferrule end, wood, bamboo or "Darbysteel" Flag Poles.

The construction of this cup prevents the accumulation of mud and water, and the bottom slopes sharply toward the center; this automatically forces the flag pole into the center hole in an upright position—there is no other place for it to go.

"DARBYSSTEEL"



Style ST — Here is a sturdy hole cup made with rim of heavy gauge seamless drawn steel tube, which will not bend, and fitted with the "Perfect" center.

"MICHELL"

Heavy galvanized sheet steel rim fitted with our standard cast iron "Perfect" center. A very substantial cup at a low price.

**PRICES OF HOLE CUPS**

	Each	Set of 18
"Perfect".....	\$3.00	\$49.50
"Darbysteel".....	1.75	28.50
"Michell".....	1.00	16.25

**HOLE-CUP**

**Rammer and Lifter**



In soil in which the cups have to be rammed into the hole this tool is very useful. Made of wrought and cast iron.

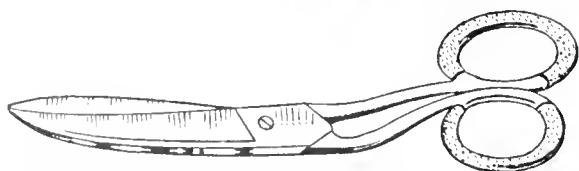
Solid iron ramming head that will not damage the cup. Special hook on the handle simplifies removal of the cup when necessary.

Price, \$2.50.

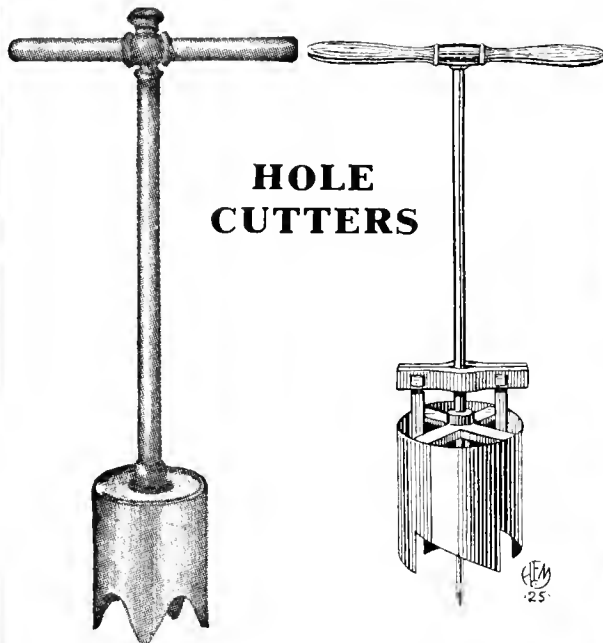
**HOLE TRIMMER**

This tool is extremely useful to the Greenskeeper who does not use a Hole-Cutter board, as one or two turns in the hole after the cutter is withdrawn finish the lip and margin of the hole perfectly. The Trimmer is very substantially made of the best cast-iron. Price, \$3.25 each.

**HOLE RIM SHEARS**



Hole trimming shears, with curved blades for cutting around the hole and rims. Leather covered handles. \$2.00 per pair.



**HOLE CUTTERS**

"Darbysteel"

"Bogey"

The "Darbysteel" cutter is made of heavy gauge seamless steel tube, will not bend, chip or break. The cutting edge has 4 bevel sharpened teeth. Each cutter is fitted with an easy working turf expeller or knockout. Holes may be cut by working the cutter either to the right or left or all the way around. Price, \$12.00 each.

"Bogey Cutter"—An imported model, made of the best seamless steel with three cutting teeth, a point for centering and an ejector. Available with plain cutting edge also. Price, \$12.00 each.

**TURF RENOVATORS**

For cutting out weedy or bare patches in turf to replace with a similar disk of good turf. Assures a perfect patching job. Same principle as the "Bogey" hole cutter, but made in various sizes.

	Each
3-inch—Straight edge.....	\$10.00
4 1/2-inch—Straight or serrated edge...	12.00
6-inch—Serrated edge.....	13.50
7-inch—Straight edge.....	13.00
8 1/2-inch—Serrated edge.....	15.00

Divot Renovator—Cuts an oval piece of turf just the shape of a divot, \$10.00.

**MICHELL POLE STANDARD**

This is the most practical and economical holder for use with plain bamboo or wooden poles. It is of our own design and is quickly and easily attached. Made of iron thoroughly galvanized; has a spring steel pocket to accommodate poles of varying thicknesses. The latter are held in position firmly in the standard by means of a clamp also galvanized. 75c. each.



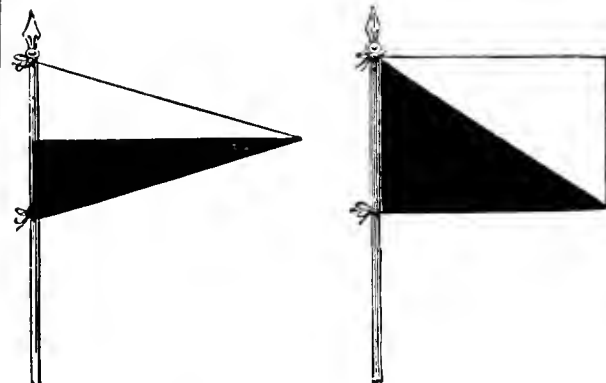
**HOLE-IN-ONE POLE ENDS**

Made entirely of steel with tubular pole socket, half-inch cold rolled steel pin and our standard flanged end.

Bamboo, Wood, or Steel flag poles may easily be inserted or removed from the socket and the pole is firmly held in place by means of a single bolt. Price, each, \$1.00



**GOLF FLAGS**



No. 2

No. 3



No. 1

Made of extra heavy bunting, which will give long service. All flags are furnished with white canvas headings, brass grommets and tie tapes.

Style No. 1. Numbered flags, 12" x 18", numerals sewed on both sides. Can be furnished in any color combination desired with solid color background and contrasting colored numerals.

Red with white numbers from 1 to 9 and white with red numbers from 10 to 18 are carried in stock. Other combinations made to order. Price, set of nine, \$4.50.

Style No. 2 & 3. Direction flags, 12" x 18" available in any color combination. No numbers. \$4.50 per doz.

Style No. 4. Same as Nos. 2 and 3, but in solid colors, without number. \$4.00 per doz.

**"DARBYSSTEEL" FLAGPOLE (Illus.)**

This "Darbysteel" Flagpole is practically indestructible, made of hollow drawn heavy gauge-enameled steel, 8 feet long, with a beautifully moulded spindle top with grooves for the flag ties and has the bottom formed to the shape of our famous "Hole-in-One" Pole end. \$2.50 each.

Sets of 18 or more, \$2.25 each.

**"MICHELL" FLAGPOLE**

A sturdy pole of straight grain ash, standard eight foot length. The brass ferrule hole-end assures rigidity in the cup. Painted in wide alternate stripes of black, white and orange and equipped with a special swivel flag holder which prevents the flag from wrapping around the pole. In ordering poles with swivel, specify the width of the flag.

Poles without swivel, \$1.25 ea. With swivel, \$1.75 ea.

**BAMBOO POLES**

Used extensively for brushing worm casts off Putting Greens, also for Flag Poles.

	Doz.	100
16 feet long.....	\$2.25	\$13.50
18 feet long.....	3.00	18.00
20 feet long.....	3.50	22.50



**THE DARBY GOLF BALL WASHER**



A complete assembly for the tee, consisting of the ball washer mounted on an upright standard, fitted with sand and water boxes, and two towel clips. Entirely rust-proof and finished in brilliant white enamel.

The Darby Washer will clean easily and quickly from one to four balls at a time. There are only two fibre brushes, one of which is revolved by turning the handle. No gears or intricate mechanism and only one moving part. Brushes are adjustable for wear and easy to replace. The stand can be fitted with socket as illustrated, which is driven in the ground at the desired location, or equipped with floor standard for use in the locker room or pro's shop.

Price, complete, \$20.00

Ball Washer only, with special fitting arranged to fasten to wall or tee box, \$15.00.  
Tee Stand only (without washer), \$8.00.  
Extra Brushes for Washer, 50c. each.

**THE WIRT TEE STAND**



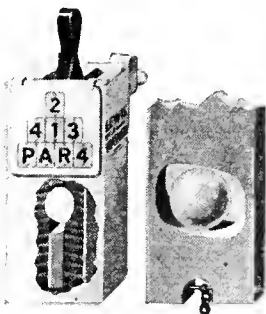
This assembly is still a favorite on the tees where players require sand.

Complete as illustrated ..... \$21.50  
Without Trash Box..... 15.75

**LEWIS TEE ENSEMBLE**

A convenient and practical combination of the Ball Washer, Tee Data Plate, Waste Container, Towel and Towel Ring, thumb-screwed to the sturdy steel channel Tee Stake. Finished in white weather-resisting enamel.

Price  
Each  
Lots of 1 to 10.. \$10.50  
11 or more..... 10.00



**LEWIS BALL WASHER**

This washer, the preference of leading golf clubs, is equipped with a paddle having a beveled oval slot which compels the ball to revolve in all directions contacting the self-adjusting brushes.

Price (not including data plate)  
1-10 Washers ..... \$6.00 ea.  
11 or more..... 5.50 ea.  
Extra Brushes for Washer..... 1.10 pr.  
Extra Paddles for Washer..... .40 ea.

**BAN**

A suds-less cleaner. Contains no soap, acid, caustic, grit or any substance harmful to golf-balls. It is odorless, does not become rancid; no suds to blow onto players' clothing.

Price per 25 pound pail, \$4.50

**TEE TOWEL**



Cannon towel 19" x 13" made of heavy white absorbent toweling with brass grommet set at center of one end. \$1.75 doz.

**TEE MARKERS**

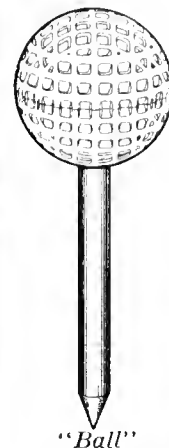
**"DARBYSSTEEL"**

This tee marker looks just like a big mushroom—made entirely of steel—6 inches in diameter, and sets up from the ground 2½ inches; finished in white enamel.

Price, per pair, \$2.00



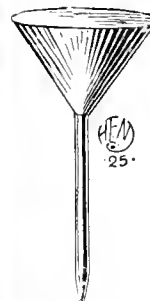
We suggest using two different types of markers on each tee to distinguish between the ladies and the men's driving line.



"Ball"



"Crown"



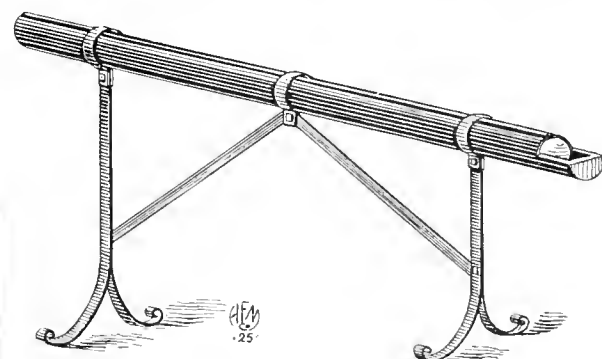
"Michell"

"Ball" — A 4 in. metal meshed Golf ball with pointed steel pin 6 in. long. Finished in white. \$1.25 each.

"Crown" — Made of cast iron, 6 in. in diameter and 3 in. high with three prongs which hold the marker firmly in position when pressed into the ground. Finished in white enamel. 75c each.

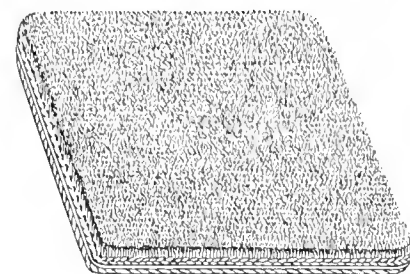
"Michell"—A solid cast iron marker 4 in. across the top with a 6 in. irremovable pin. May be inserted flush with the surface, or to the base of the cone only. 75c each.

**STARTING BALL TROUGH**



For use on frequented courses. Players drop their ball in trough on arrival to determine their position in play. Enameled red, holds 30 balls, all metal. \$12.00 each.

**COCOA TEE MATS**



This mat is made of heavy material which insures durability, can be kept full of sand so as to be practically hidden. The saving of labor required by Grass Tees repays the cost of these mats in a short time.

Size, 30 x 48 in. Color, Brown, \$8.00 each.

**PRACTICE GREEN MARKERS**



Made with cast iron numeral plates in sets 1 to 9 and 1 to 18 fitted to steel rods 26 in. long and at the bottom there is a special fitting which catches the balls as they drop in the cup.

Lifting out the Marker causes the ball to drop on the green. Save stooping and reaching down into the cup to get the balls. These Markers are painted bright red with black letters, and the base is painted goldenrod yellow. However, we can paint any combination of colors desired to suit any club at a slight additional cost. These Markers are very practical and every club should have one or two sets.

Complete sets of Markers can be furnished. Price, each, \$1.50.

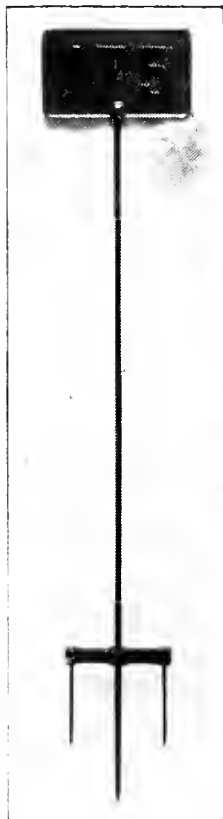
**DISTANCE MARKERS**

Cast metal sign is 8 in. wide by 4½ in. high, finished in brilliant "Goldenrod" yellow with raised black numerals, 3 in. high on both sides; mounted on a heavy steel rod.

The signs stand 36 in. out of the ground; offered in sets of 36 markers and rods and each set consists of 9 markers each of 175, 200, 225 and 250 yards, which takes care of a 9-hole course.

We can also furnish these markers in 100, 125, 150, 275, 300, 325, 350, 375, 400 and 500 yards.

Price, each, \$1.50.



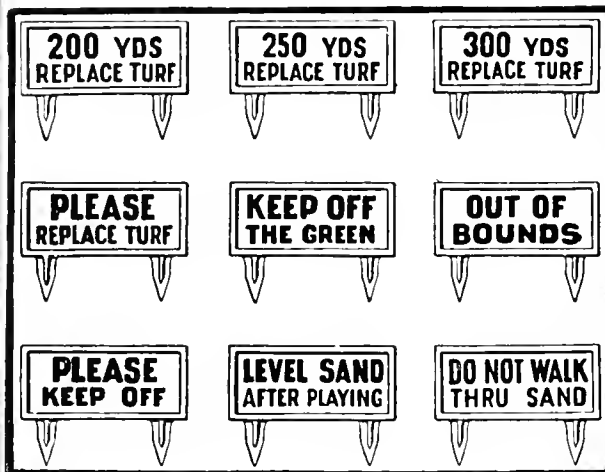
**SMALL DISTANCE MARKERS**

Small distance marker, 8 x 4 inches, complete with rod, any yardage, \$1.00 each.



No. 2052

**NOTICE MARKERS**



Made of cast plate, size 14" x 6" with raised letters 1½" high and double ground spikes. Finished in Goldenrod Yellow with black letters.

These markers are a constant reminder to the careless or indifferent player, and when advantageously placed, get immediate results.

**STANDARD TITLES**

In addition to those illustrated above. "150 yds. Replace Turf", "Parking Space", "No Parking Here", "Ground Under Repair", "Please Replace Divots".

Price—\$1.50 each.

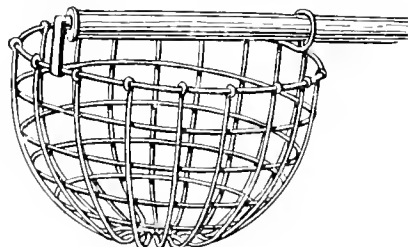
Special Titles, made to order only, can be furnished in same pattern as above at \$2.50 each.

**BALL RETRIEVERS**



"Crown"

Made of high-grade cast iron finished in baked enamel. Easily fitted to any size pole. Strong enough to dig in mud and light enough to be easily handled. Doesn't bend out of shape and comes up with the ball every time. Cast Iron, each, 50c.



Michell No. 1

These Retrievers are made of heavy wire, close mesh, well galvanized. They are six inches in diameter and six inches deep in center, shaped as illustrated. Easily attached to a pole of any length. 75c. each (without pole).

**COMPRESSED AIR SPRAYERS**

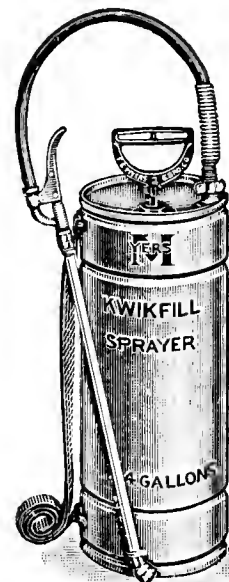
Myers New Idea Knapsack Sprayer  
A compact sprayer, very convenient to use. Ideal for small-scale spraying against brown patch or turf insects.



No. 1330. Galvanized Tank. Capacity, 4 gals. 18-in. brass extension rod. Weight, 15 lbs. Price, \$12.00.

**Myers Kwikfill Sprayers**

Funnel-shaped top simplifies filling. Larger compression chamber gives longer operation without re-pumping.



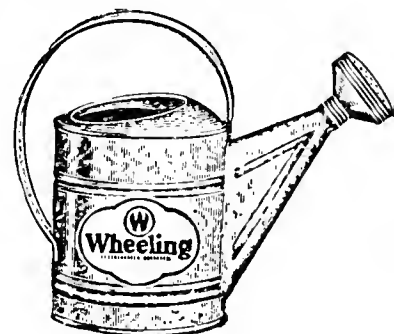
No. 2242. Galvanized Tank. Capacity, 4 gals. 18-in. brass extension rod. Weight, 13 lbs. Price, \$5.00.

No. 2242B. Brass Tank. Capacity, 4 gals. 18-in. brass extension rod. Weight, 13 lbs. Price, \$8.50.

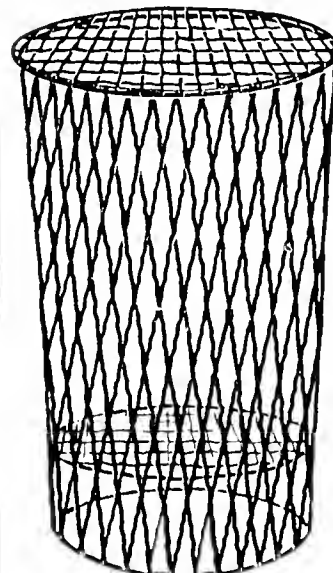
**GALVANIZED WATERING-CANS**

Made of light galvanized iron.

- 4 qt. . . . \$0.70
- 6 qt. . . . .75
- 8 qt. . . . .85
- 10 qt. . . . 1.00
- 12 qt. . . . 1.15
- 16 qt. . . . 1.65



**RUBBISH CONSUMERS**



Special

Made throughout of extra heavy galvanized crimped wire and built to last indefinitely. Will withstand the most severe heat.

Special — 30" high, 20" top, 16" at bottom—\$5.50.

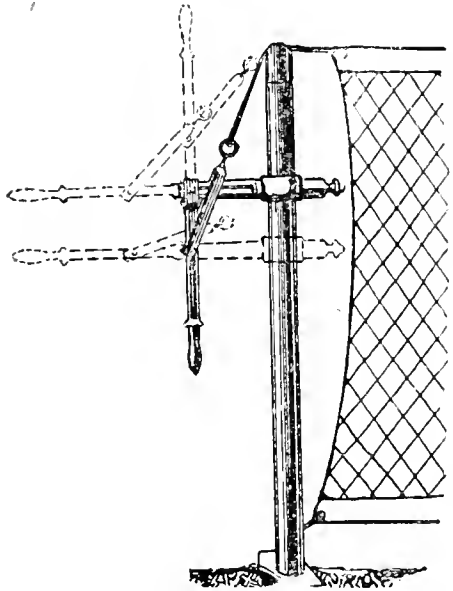
No. 10—16 x 22, \$10.50.

No. 20—20 x 30, \$14.85.

## TENNIS COURT EQUIPMENT

### THE NEW LANE JIFFY NET TIGHTENER

Made especially for those who do not wish to go to the expense of installing high-priced steel posts, and yet enjoy the same principle as used in the Excelsior Steel Posts. Easy to adjust. For wood posts only. Price, \$3.75.



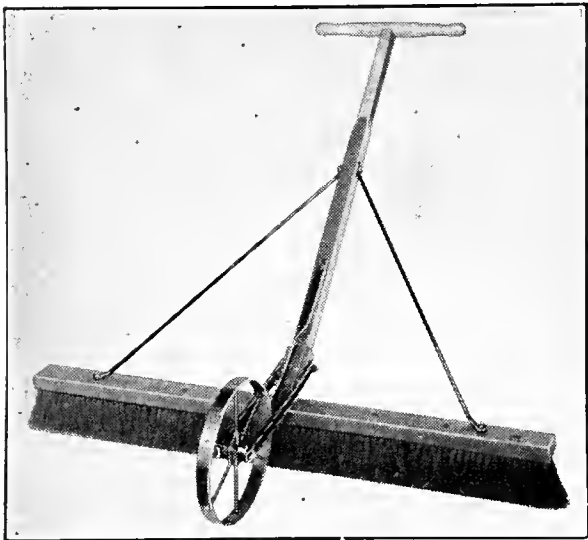
Excelsior Poles  
Special Sockets for Dirt or Grass Courts

with tarred nets where extra leverage is required. Finished in dark green enamel. Price, per pair, \$17.00. Specify whether for grass or clay courts.

### TENNIS COURT ROLLERS

The Water-Ballast Roller is ideal for tennis court work. See illustration, sizes and prices listed on page 6.

### THOMPSON SWIFTWAY SWEEPER



A very useful brush for covering large surfaces quickly. Especially necessary for tennis courts and putting greens. The wheel stabilizes the pressure which can be automatically controlled by the operator. Adjustable handle. Brush units are made of high grade bassine and are replaceable at small cost.

- No. 48. Thompson Swiftway Sweeper, with 48-inch brush, \$17.50  
No. 32. Thompson Swiftway Sweeper, with 32-inch brush, 15.00  
Shipping weight, 25 lbs.

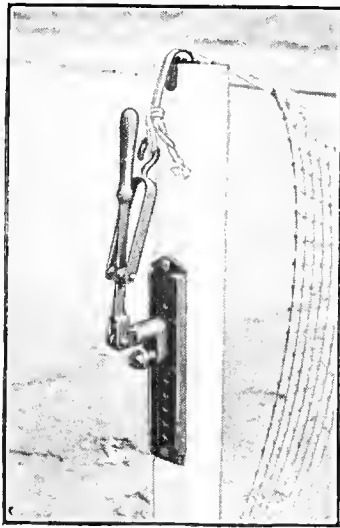
### EXCELSIOR BROOM

A high class bassine push broom 36" wide, neither too hard nor too soft, developed especially for clay courts, but equally useful for golf greens. Supplied with handle. Price, \$10.00.

### CALCIUM CHLORIDE

Clay and gravel courts should be dressed at least once each season with this material to provide a good binding, to prevent dust and the growth of weeds. Crystallized form, easy to apply by simply broadcasting by hand. Court may be treated in the evening, and is ready for play the following morning. We recommend four hundred pounds for a full sized court. Do not use on grass.

Price, per 100 lb. bag, \$2.75; 400 lb. drums \$2.50 per 100 lbs.



Jiffy Net Tightener

### EXCELSIOR TENNIS POLES

These all-steel posts will last indefinitely as there is nothing to break or get out of order. Made of extra heavy 2 1/2" steel pipe, complete with the Jiffy Net Tightener as illustrated. The net can be tightened or loosened in a few seconds without effort. Especially necessary with tarred nets where extra leverage is required. Finished in dark green enamel. Price, per pair, \$17.00.

### TENNIS COURT AND FIELD MARKERS

LINE-O-GRAPH marking machines are considered the standard everywhere and are unqualifiedly guaranteed to give perfect satisfaction. All models are regularly equipped for marking on dirt, but by using the Roller Attachment (no extra charge if ordered with machine) grass may be perfectly marked.

"Universal"—Most popular at Clubs and Colleges for Tennis and Field marking. Sturdily built of metal throughout and will give perfect satisfaction for from 10 to 20 years without repair. Tank capacity 7 gals. Wheels are 10" in diameter with 2" tread. Will mark both 2" and 3" width lines, the latter for Football and Baseball Fields, etc. Weight 60 lbs.

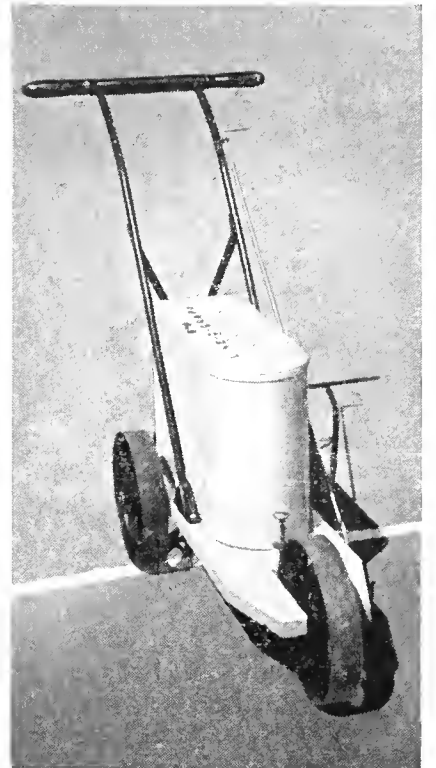
Price, \$50.00.

"Peerless"—This model has the same tank capacity and ability as the Universal but is of lighter construction, having a wooden frame instead of metal. Weight 52 lbs.

Price, \$35.00.

"Junior"—Designed for Private Courts or small clubs having but 1 or 2 courts. Wooden frame, smaller capacity (3 gal.) and lighter design than the two larger machines. Weight 30 lbs. Price, \$25.00.

Prices are F. O. B. Factory.

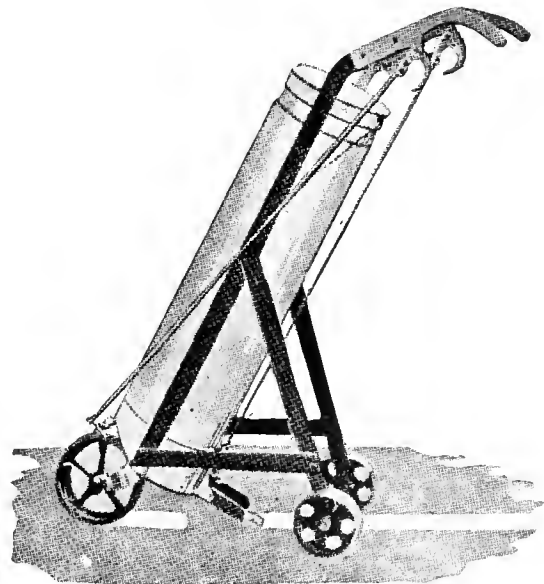


Line-o-Graph "Universal"

### EXCELSIOR MARKERS

These machines are made entirely of steel, lasting indefinitely and the close spacing of the wheels assures a straight even line.

In the "Two-In-One" the front pet cock throws the whiting on the front wheel which presses a clean line into the turf when marking grass courts or athletic fields. The rear spigot with brush attachment is for dirt courts. Both spigots can be opened at the same time to give double action.

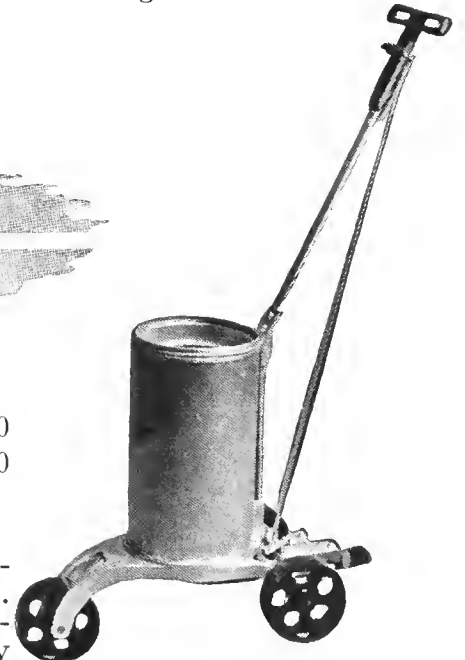


"Two-in-One" Marker

Made in two sizes:

- 3 1/2-gallon capacity . . . . . \$21.50  
7-gallon capacity . . . . . 28.50

The "No. 5" is a practical low-cost marker, easy to operate. Rear marking action only. Suitable for grass or dirt. Capacity 2 1/2-gallons, \$13.50.



"No. 5" Marker

### COMMERCIAL WHITING

Far superior to lime for dirt or grass courts and athletic fields. Makes a brighter, longer lasting line that will not curl or blister and which is less affected by rain. Positively will not burn grass or affect the soil. Simply mix with water. 50 lbs., \$1.75; 100 lbs., \$3.00; 300 lb. bbl., \$8.25.

# FUNGICIDES FOR BROWN PATCH CONTROL

Every unchecked fungous attack on the turf means additional fertilizing, top dressing, weeding, or even resodding;—needless maintenance expenses that can be avoided by taking simple preventive measures now *practised* and *praised* by hundreds of greenkeepers. These greenkeepers treat their turf regularly with a mercurial fungicide.

Maintenance costs are considerably reduced by *preventing* brown patch and other fungous diseases. Inspect the greens early each morning, and at the first appearance of any brown patch spots, spray the spots immediately. This application can be made with a small knapsack sprayer. If there are many spots, the whole greens should be given a thorough treatment. Subsequent morning inspections should follow. During prolonged periods of hot, humid weather, it is advisable to treat the greens every week or ten days with mercurial fungicides. Further treatment in late fall to prevent "snowmold" during the winter months is strongly recommended.

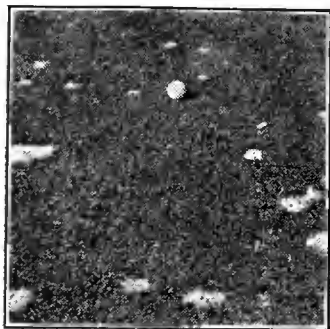


Brown Patch



## TURF FUNGICIDES

The Du Bay Fungicides—*Special Semesan*, *Semesan*, and *Nu-Green*—have successfully prevented and controlled brown patch for clubs in every section of the United States under widely varied soil and weather conditions. They are recognized as the standard brown patch remedy, because they (1) Are equally effective against both the dollar spot and large brown patch; (2) Quickly check attacks of brown patch and aid in rapid recovery of the grass; (3) Effectively prevent brown patch throughout the season when regularly applied; (4) Give the maximum period of protection against this disease; (5) Are harmless to grass when applied as recommended; (6) Do not accumulate in the soil and tend to poison the turf; (7) Are easy to apply.



Dollar Spot

*Special SEMESAN* provides a brown patch remedy much lower in cost than the organic mercuries previously used for this purpose. It now costs *only* \$1.29 a green per application. Yet *Special Semesan* offers all the well-known advantages of organic mercurials—effectiveness, safety, and ease of application.

During the past two seasons, *Special Semesan* has successfully prevented and controlled large brown patch and dollar spot under widely varying conditions

*SEMESAN* is the original brown patch fungicide. It has been used successfully by many clubs for more than a decade, and has generally given excellent control under the most severe brown patch conditions. It is highly effective under all conditions but is recommended especially where the turf is in a good state of fertility.

*Semesan* is applied at the rate of one pound to fifty gallons of water to 3,000 square feet. It may be applied also dry at the rate of one-third of a pound to 1,000 square feet of turf.

*NU-GREEN* contains the same effective ingredient as *Semesan* but has the added property of quickly restoring the diseased grass to its normal healthy condition where soil fertility is not suited to its rapid recovery.

*Nu-Green* is applied at the rate of one pound to fifty gallons of water to 2,500 square feet of turf. It may be applied also *dry* at the same rate as *Semesan*.

Keep a supply of *Special Semesan*, *Semesan* or *Nu-Green* on hand, ready to start treatment the minute the temperature hits 73° and the humidity 75%—the danger signs that brown patch is near.

throughout the country.

Greens treated with *Special Semesan* have shown no indications of burning, when applications were properly made. Like other organic mercuries it has high toxicity to brown patch fungi and low toxicity to the tender turf.

*Special Semesan* is applied in *solution* or *dry* at the rate of one pound to 6,000 square feet.

### PRICES OF DU BAY FUNGICIDES

SEMESAN	
2 oz. can . . . . .	\$ .35
1 lb. can . . . . .	2.25
5 lb. can . . . . .	9.90
25 lb. pail . . . . .	45.50
100 lb. drum . . . . .	180.00
300 lb. drum . . . . .	535.00
1 lb. treats 1,000—3,000 Sq. Ft.	



SPECIAL SEMESAN	
5 lb. can . . . . .	\$ 7.00
25 lb. pail . . . . .	33.00
100 lb. drum . . . . .	129.00
1 lb. treats 6,000 Sq. Ft.	



NU-GREEN	
3 oz. can . . . . .	\$ .35
1 lb. can . . . . .	1.45
5 lb. can . . . . .	6.30
25 lb. pail . . . . .	29.00
100 lb. drum . . . . .	115.00
300 lb. drum . . . . .	338.00
1 lb. treats 1,000—2,500 Sq. Ft.	



### CALO-CLOR



A combination of Corrosive Sublimate with Calomel, containing 81% of Mercury Metal in chemical combination. Use Calo-Clor at the rate of 3-oz. per 1000 sq. ft. to control a severe attack, or one-third this amount for prevention.

### CALOGREEN



An extremely finely divided form of Calomel, containing 85% Mercury Metal. It is insoluble in water, slow to act and gives protection over many days. It is the best control for Small Brown Patch.

Calo-Clor and Calogreen are recommended for *dry* application. For applying in solution use *Suspension Calo-Clor* or *Suspension Calogreen*, the regular parent mercurial to which a suspension agent has been added. This does not interfere with its action in any way, but makes possible more even distribution through power sprayers.

All four types are put up in three sizes: 1 pound, 5 pounds, and 25 pounds. Ask for current prices.

**CORROSIVE SUBLIMATE** (Bichloride of Mercury). A mercurial fungicide containing 74% Mercury Metal. This chemical is very quick acting, water soluble, with a relatively short period of protection. Recommended for severe fungus attacks where immediate results are desired. Prices on application.

## TURF PEST REMEDIES

### WEEDS

#### Aeroil Weed Burner



A new application of an old principle, the Aeroil Burner is a practical, efficient weed destroyer. When properly used it will positively destroy any kind of weed or brush, killing stems, roots and seeds, once and for all. Especially valuable for burning out heavy infestations of crab grass, as reseeding can be done much sooner than when chemicals are used. Has many other uses. Write for complete details.

- Aeroil No. 99, complete with 4 gal. tank and hose....\$20.00
- \*Without tank..... 12.50
- Aeroil No. 99 Junior, with 2 gal. tank.. 15.00
- \*Without tank..... 10.00

\*The Aeroil Burner can be used with any type compression tank.

#### Michell's Weed Killer

Positively destroys every kind of weed and vegetation wherever applied. Recommended for driveways, walks, clay tennis courts, etc. As its effect is long lasting, this material should *not* be used where grass seed is to be sown. One gallon, diluted in 40 gallons of water is sufficient to cover 150 sq. yds.

- Gallon.....\$1.25 | 30 gal.....\$25.00
- 5 gal..... 5.75 | 50 gal..... 40.00

#### Climax Lawn Sand

A special imported preparation which will kill weeds on the Greens or Fairways without permanent injury to the grass. Especially effective against Moss, Chickweed, Plantain, Dandelion and all weeds with a fibrous root system, at the same time promoting the growth of the desirable turf grasses. 28 lbs. is sufficient to treat 1000 square feet.

- 7 lb. can.....\$1.25 | 28 lb. drum.....\$3.75
- 14 lb. can..... 2.25 | 56 lb. drum..... 6.00
- 112 lb. drum.....\$11.50

#### Miscellaneous Weed Destroyers

**Sodium Chlorate.** Sugar-fine form, readily soluble. 5 lbs., \$2.00; 25 lbs., \$7.50; 100 lbs., \$17.50.

**Sodium Arsenite.** 1 lb., \$1.50; 5 lbs., \$6.25. Prices for larger quantities on application.

The above chemicals have been the basis of recent astonishing and successful experiments in weed control by the U. S. G. A. and cooperating agencies, the former in control of grassy and most annual weeds, the latter for deep-rooted perennial and mat-forming weeds. Both are extremely high powered and should be used only with a thorough knowledge of the proper procedure.

**Sulphate of Iron.** 5 lbs., 50c.; 25 lbs., \$1.75; 100 lbs., \$4.00.

### JAPANESE BEETLES

**Revivo.** For destroying Beetle Grubs and other injurious insects in the ground. Contains arsenate of lead mixed with materials beneficial to the turf and capable of checking weeds. Use at the rate of 100 lbs. to 2500 square feet.

- 100 lbs.....\$5.00 | Ton.....\$90.00

**Arsenate of Lead.** Powder form, highest quality. Use at the rate of 10 lbs. per 1000 sq. ft. preferably in mixture with sand or soil. Prices quoted on application.

**Beetle Traps.** Ellisco No. 4. A recent development, approved by the U. S. D. A. and the most popular trap on the market. Can be fitted to standard Mason jars.

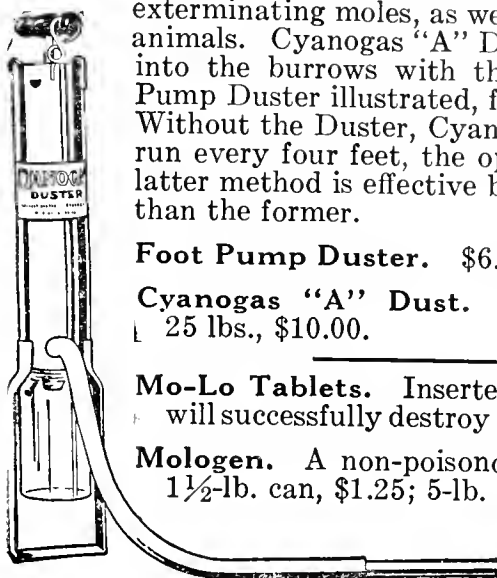
Price without jar, 90c. ea.

**Beetle Bait.** Lb., 70c.; 5 lbs., \$2.75.

### MOLES

#### Cyanogas

The Cyanogas Method is the most effective means of exterminating moles, as well as rats and other burrowing animals. Cyanogas "A" Dust can readily be forced deep into the burrows with the specially constructed Foot Pump Duster illustrated, for positive, quick eradication. Without the Duster, Cyanogas may be dropped into the run every four feet, the opening closed with sod. This latter method is effective but of considerably more labor than the former.



**Foot Pump Duster.** \$6.00 ea.

**Cyanogas "A" Dust.** 75c. per lb.; 5 lbs., \$3.00; 25 lbs., \$10.00.

**Mo-Lo Tablets.** Inserted in the run every four feet, will successfully destroy and drive out moles. Pkg., 25c.

**Mologen.** A non-poisonous repellent in powder form. 1½-lb. can, \$1.25; 5-lb. can, \$4.00.

#### Mole Traps

Kill moles in the run by means of sharp steel spikes released when the animal touches the sensitive trigger. Three types. **Acme**.....\$2.00 | **Olmstead**....\$2.00 | **Reddick**....\$1.25

### EARTH-WORMS

#### Mowrah Meal

A non-poisonous, dry powder which can be dusted over the area to be treated and will effectively and promptly bring earth-worms to the surface and kill them. It can be used with perfect safety without danger of injuring the finest grass, and in addition, the residue acts as a fertilizer.

For best results, select a mild day when the earth is moist and the worms active. Apply Mowrah Meal at the rate of a half pound per square yard and then *saturate* with water. The worms will immediately come to the surface to die, and can readily be swept up.

- 100 lbs.....\$3.50 | 1000 lbs.....\$27.00
- 500 lbs.....15.00 | Ton..... 50.00

### CHINCH BUGS

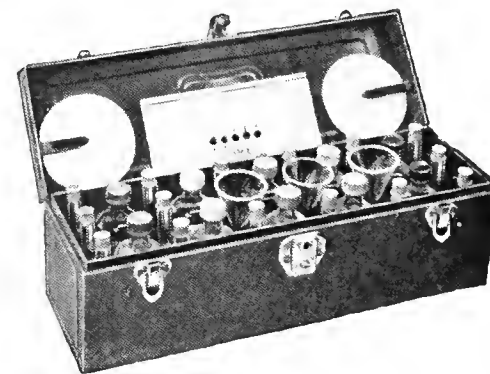
The most effective control of this latest turf pest has been accomplished with rotenone dusts. We offer *SULROTE* a sulphur and rotenone mixture, which in actual experiments has given *complete* results. It should be uniformly dusted over the infested areas at the rate of 10 lbs. per thousand square feet, during the hottest part of the day when the bugs are active, and subsequently brushed in.

- 5 lbs.....\$0.95 | 25 lbs.....\$4.10
- 100 lbs.....\$15.50

### SUDBURY SOIL TESTING KIT

A truly professional apparatus but so simple to use that any amateur can make quick, practical field tests to determine acidity of soil, or any possible deficiency in nitrogen, phosphorus and potash. Complete instructions included with each kit. Cased in a strong metal box. Contains enough material for 200 individual tests.

Price, \$18.50.



CONSULT OUR SERVICE DEPARTMENT ON YOUR TURF PEST PROBLEMS

ALL PRICES SUBJECT TO MARKET CHANGES

## GENERAL INSECTICIDES

Below is given a partial list of our complete line of insecticides, most applicable in the care of golf courses, parks, cemeteries, etc. The entire line is listed in our regular catalogue, a copy of which will be furnished on request.

- "ANTROL" ANT TRAPS.** For the eradication of both grease and sweet eating ants, killing entire colonies in the nest. Safe, economical and very convenient to use. Traps are only 2¼" in diameter, practically unnoticeable. Ea., 15c.; \$1.75 per doz.
- "ANTROL" ANT & ROACH POWDER.** An improved, fast-killing powder for the extermination of ants and roaches. 3 oz. can, 25c.; 5 lbs., \$3.25.
- ARSENATE OF LEAD (Coated).** An oleate form of this valuable insecticide, recommended for wet spraying against Japanese Beetle and all leaf-eating pests. Mixes readily with water, spreads evenly, and remains on the foliage longer than the powdered form. 10 lbs., \$2.50; \$5.50 per 25 lbs.; 100 lbs., \$15.00; 550-lb. drum, \$82.50.
- ARSENATE OF LEAD (Powder).** 10 lbs., \$2.40; 25 lbs., \$4.50; \$15.00 per 100 lbs. Prices for larger quantities on application.
- BLACK LEAF "40".** A 40% Nicotine Sulphate, the standard contact insecticide for control of soft-bodied pests. Gives effective control of sod web-worms and chinch bug. Lb., \$2.25; \$3.25 per 2 lbs.; 5 lbs., \$5.85; \$10.60 per 10 lbs.; 50-lb. drum, \$42.50.
- BORDEAUX MIXTURE (Powder).** A 12% copper mixture, very valuable as a fungicide. 5 lbs., \$1.25; \$4.50 per 25 lbs.; 100 lbs., \$15.00.
- BORERKILL.** A new effective method of tree-borer control. By means of the special injector tube, a scientifically prepared paste is introduced into the burrow, killing the insect. 1½ oz. tube with injectors, 60c.; \$8.00 per 4-lb. can.
- CALCIUM CASEINATE.** Used as a spreader with insecticides that do not mix readily. 5 lbs., \$1.00; 25 lbs., \$4.25.
- CYANOGAS ANT KILLER.** Calcium Cyanide dust in a special spouted can, very effective in eliminating ants. 4-oz. can, 30c.; doz. cans, \$3.50.
- DOGZOFF.** A new animal repellent, inoffensive to humans, that will keep away dogs, cats, rabbits and squirrels. Apply full strength with small sprayer. Effect will last from 3 to 4 weeks. 4-oz. can, 60c.
- EVERGREEN SPRAY.** A non-poisonous insecticide for killing both chewing and sucking insects. 16 oz., \$2.00; \$9.50 per gal.; 5 gals., \$42.50.
- JAPTOX.** Kills and repels Japanese Beetles. An arsenical base with suitable spreader which adheres longer to foliage than any other spraying material. Simply mix with water and apply with sprayer. One pound makes 10 gallons of solution. 8 lbs., \$2.75; \$6.00 per 25 lbs.; 100 lbs., \$16.00.
- PYRETHRUM POWDER.** Concentrated raw pyrethrum dust valuable for its insect-killing ability. \$2.00 per 5 lbs.; 10 lbs., \$3.75; 100 lbs., \$30.00.
- RED ARROW INSECT SPRAY.** A highly concentrated extract of pyrethrum combined with a special soap spreader. Pt., \$2.25; \$3.85 per qt.; gal., \$10.00; case 6 gals., \$8.50 per gal.
- ROTENONE DUST.** Contains 0.75% Rotenone, a powerful killing agent. 5 lbs., \$1.10; \$5.25 per 25 lbs.; 100 lbs., \$19.00.
- SCALECIDE.** A complete dormant spray for controlling scale on deciduous and evergreen trees. \$1.55 per gal.; 5 gals., \$5.50; 10 gals., \$9.00; 30 gals., \$21.00; 50 gals., \$29.00.
- SNAROL.** For the control of snails, slugs, cutworms, etc. Non-injurious to vegetation. 4 lbs., 55c.; 15 lbs., \$1.90; \$4.25 per 50 lbs.
- SOAP (C. P. O.).** For control of many insects especially on evergreens. Valuable as a spreader, and efficient against some pests by itself. Qt., 95c.; \$2.40 per gal.; 5 gals., \$9.00.
- SULPHUR.** Finely powdered form. 25 lbs., \$1.75; 100 lbs., \$6.50; bbl. lots (about 200 lbs.), 6c. per lb.
- SULPHUR (Wettable).** Microscopic sulphur for wet spraying. Contains 95% pure sulphur 325 mesh fineness. Remains in suspension when mixed. 10 lbs., 90c.; \$2.00 per 25 lbs.; 100 lbs., \$7.00.
- SULROTE.** The chinch bug remedy. See description and prices on preceding page.
- TOBACCO DUST (for dusting).** 25 lbs., 85c.; 100 lbs., \$2.50; ½ ton, \$23.00; \$45.00 per ton.
- TOBACCO STEMS (fresh).** Bales (about 375 lbs.) at 1¼c. per lb.; ½ ton, \$12.50; \$22.50 per ton.
- TREE TANGLEFOOT.** Painted in a band around the trunks of trees, this material stops all climbing insects. 5-lb. can, \$2.85; 10 lbs., \$5.50; \$11.50 per 25 lbs.
- WORM DESTROYER.** For earthworms. See description and prices on preceding page.

## FERTILIZERS AND SOIL CONDITIONERS

### ADCO

For making artificial manure from refuse such as leaves, grass clippings and almost any non-woody vegetable waste. When applied to the refuse and kept moist, *Adco hastens decomposition* and gradually converts the mass into real manure, fully equal to the farmyard product in food value but without the many disadvantages of the latter. Very simple to use. 150 lbs. is sufficient to make 3 tons of manure.

25 lbs.....	\$1.85	600 lbs.....	\$40.00
150 lbs.....	10.00	2100 lbs.....	138.00

### AMMO-PHOS

A concentrated granular fertilizer containing 16% nitrogen and 20% phosphoric acid of a form that cannot readily be leached out of the soil. Particularly stimulating to bents and fescues, it discourages the growth of weeds and clover. For greens, an early spring application of 5 lbs. per 1000 sq. ft. preferably mixed with compost followed by a late spring application of the same amount and mid-summer and fall applications of 3 lbs. per 1000 sq. ft. meets most conditions. On fairways, three applications per year of 150 lbs. per acre will meet normal requirements. Excessive applications at any time should be avoided.

100 lbs.....	\$5.00	½ ton.....	\$40.00
Ton.....			\$70.00

### ASHES, HARDWOOD

Excellent for top dressing fairways and putting-greens, applied to best advantage in early spring or late fall. Rich in potash. Apply 25 lbs. per 1000 sq. ft.

100 lbs.....	\$2.50	200-lb. bbl.....	\$4.25
Ton.....			\$35.00

### BONE MEAL

An excellent turf fertilizer furnishing nitrogen and phosphoric acid, which produces a dark green rich growth. Apply 800 lbs. per acre on established grass and 1500 lbs. per acre when preparing new ground for seeding.

100 lbs.....	\$3.00	½ ton.....	\$23.00
Ton.....			\$45.00

### BONE, COARSE GROUND

Similar in action to the above, but of coarser nature, about the size of rice. The action of coarse bone is much slower and the effect more lasting than the finer material.

100 lbs.....	\$4.00	½ ton.....	\$36.50
Ton.....			\$70.00

### BLOOD, DRIED

A very quick acting fertilizer, extremely rich in nitrogen, and being animal base there is no danger of burning. Indispensable where quick results are wanted.

100 lbs.....	\$4.50	½ ton.....	\$37.50
Ton.....			\$72.50

## FERTILIZERS AND SOIL CONDITIONERS

### BOVUNG

A plain, dried cow manure combining the chemical values of fertilizer with the organic and physical values of manure. It contains all essentials necessary for soil improvement and vigorous plant growth. On turf, use 100 lbs. per 1000 sq. ft.

100 lbs.....\$2.50 | ½ ton.....\$20.00  
Ton.....\$37.50

### CAL-NITRO

A specially treated form of calcium, granular, and not subject to caking like the natural form. This product is available in two grades containing approximately 20% nitrogen and 16% nitrogen respectively, with 40 to 50% precipitated calcium carbonate.

Prices on application.

### CASTOR POMACE

An organic plant food furnishing nitrogen in a readily available form.

100 lbs.....\$3.50 | ½ ton.....\$32.00  
Ton.....\$60.00

### CATTLE MANURE (Shredded)

Wizard Brand. A highly concentrated form of cow manure dried and sterilized by a direct heat process. Completely free of live weed seeds, and can be used with perfect safety at any time. Use one ton per acre on new ground or half this quantity on established grass.

100 lbs.....\$3.00 | ½ ton.....\$27.00  
Ton.....\$52.00

### CHARCOAL

This material is excellent for correcting sour soil and for lightening heavy soils. It has no plant food value, but is used extensively on greens for the above purpose, applied with top-dressing at the rate of 50 lbs. per 1000 sq. ft.

100 lbs.....\$2.50 | ½ ton.....\$16.00  
Ton.....\$30.00

### COTTON SEED MEAL

Rich in Potash and Ammonia, which makes this material excellent for both greens and fairways, especially on newly planted ground. It has a tendency to make the soil slightly acid, and hence will discourage the growth of clover and weeds. Apply 800 lbs. per acre.

100 lbs.....\$3.50 | ½ ton.....\$30.00  
Ton.....\$57.50

### V. C. FAIRWAY FERTILIZER

An ideal golf course fertilizer containing 6 units of Nitrogen, 6 units of Available Phosphoric Acid and 4 units of Potash, all 100% soluble. Made by a patented liquid impregnation process whereby rich plant foods are absorbed into 1200 lbs. of soil enriching humus material (granulated tobacco stems) per ton of fertilizer. No rock dust, no inert filler. Contains repellent to angle worms, grubs and other soil insects. Apply 10 to 20 lbs. per 1000 sq. ft. using heavier amount in early spring and repeating with a lighter dressing at 60 day intervals. Apply just before a rain, or water thoroughly after application.

100 lbs.....\$3.00 | Ton.....\$46.00

### GYPSUM (Land Plaster)

A source of calcium which can be used safely where it is desired to keep the soil acid, because unlike lime, it does not have an alkaline effect. Can be applied with manure and other organic materials.

100 lbs.....\$1.75 | ½ ton.....\$13.50  
Ton.....\$25.00

### FLORANID (Urea)

A highly concentrated nitrogen fertilizer containing 46% soluble nitrogen, the plant food most essential for rapid, luxuriant growth. This soluble nitrogen is in the same form as the nitrogen in liquid manure and is especially valuable for giving foliage a rich, dark green color. Floranid must be used with extreme care at the rate of 5 oz. per 100 sq. ft. or 1½ lbs. in 50 gals. of water when applied in liquid form.

10 lbs.....\$1.45 | 25 lbs.....\$2.65  
100 lbs.....\$9.00

### HORTOBACCO

A fertilizer with a tobacco dust base, having a distinct insecticidal value in addition to its food value. Will not burn even when applied during the summer. Apply 1000 lbs. per acre.

100 lbs.....\$2.75 | ½ ton.....\$24.00  
Ton.....\$45.00

### HYPER-HUMUS

An excellent organic material for top dressing, finely pulverized and entirely free of weed seeds. See description on inside back cover.

¼ ton.....\$8.00 | ½ ton.....\$13.00  
Ton, in bags.....\$22.50

Ask for delivered prices on larger quantities in bulk.

### MICHELL'S LAWN DRESSING

This is a well balanced fertilizer developed especially for turf feeding. Having a 4-8-4 analysis, these food units are contained in various forms and are released over a long period, giving immediate as well as continual results. Use at the rate of 1000 lbs. per acre.

100 lbs.....\$2.75 | ½ ton.....\$25.00  
Ton.....\$45.00

### LIME, HYDRATED

A finely powdered form of slaked lime, with a high calcium content, quick in action. Apply from ½ to 2 tons per acre.

100 lbs.....\$1.25 | ½ ton.....\$10.00  
Ton.....\$18.00

### LIMESTONE, PULVERIZED

A slower acting, more permanent and coarser source of calcium, especially valuable on heavier soils. Use double the amount of hydrated lime.

Ton.....\$16.00

### MANURE

#### (Fresh Horse, Stockyard, and Cow)

On short notice we can usually supply first class horse, cow and stockyard manure in carload lots only.

Prices on request.

### MURIATE OF POTASH

Analysis equal to 50% actual potash. Apply 100 to 150 lbs. per acre, preferably with other fertilizers.

100 lbs.....\$3.75 | ½ ton.....\$29.00  
Ton.....\$55.00

### MUSHROOM SOIL

We can furnish this topdressing material in the coarse or the screened state in truckloads of 4 to 7 tons or carloads of 20 tons or more.

Prices on application.

### NITRATE OF SODA

This chemical is extremely high in nitrogen content and requires great care in the application. Mix with suitable carrier to assure even distribution or apply in liquid form. Apply 2½ lbs. per 1000 sq. ft.

100 lbs.....\$3.25 | ½ ton.....\$29.00  
Ton.....\$55.00

### NITROPHOSKA

A soluble, high analysis complete fertilizer, producing excellent results at a very low cost. It contains 15% nitrogen, 30% phosphoric acid and 15% potash, all soluble and quick acting. Apply 4 to 6 lbs. per 1000 sq. ft. preferably mixed with compost or some other carrier to assure even distribution. May also be applied in liquid form mixed with water.

100 lbs.....\$6.00 | Ton.....\$110.00

### PEAT MOSS

A moisture retaining humus and an aid in conserving soil fertility. It furnishes the organic matter which all soils require. We offer the highest quality imported material, granulated and free of lumps and impurities. Packed in 22 bu. bales, burlapped and wired. \$3.00 per bale; 10 bale lots, \$2.75 per bale.

Discover how really  
**EASY** it is to grow



**thick, luxuriant grass!**

● All over the country, men who are responsible for the condition of leading golf courses, tennis courts, cemetery grounds and college campuses will tell you that the *simplest, surest* and *easiest* way to grow thick, luxuriant grass is to use Nitrophoska and Floranid.

Nitrophoska is a *concentrated, complete* fertilizer — four times as rich in plant food as the ordinary complete fertilizer. And all of its plant food is *soluble* and *quick-acting*. It gives you *better turf* at *less cost*.

Floranid contains 46% Nitrogen (55.9% Ammonia) in the same soluble organic form as the nitrogen in liquid manure. It is both *quick-acting* and *long-lasting*.

Give your grass Nitrophoska and Floranid and you'll give it the richest color and greatest luxuriance it has ever had.

**Use**

**NITROPHOSKA AND FLORANID**

***To Grow Better Turf on***

**GOLF COURSES · TENNIS COURTS · CEMETERIES · COLLEGE CAMPUSES**



## FERTILIZERS AND SOIL CONDITIONERS

### PHILOGAN

A natural manure sludge, treated and manufactured by a highly scientific process with nothing added or taken away. All weed seeds and harmful bacteria are destroyed. For turf on established greens and fairways, it has no equal. Large applications can be made without danger of burning, and worn-out turf is restored to its original condition in a short time. Philogan makes an excellent carrier for Arsenate of Lead when treating for beetle grubs. Use 30 lbs. per 1000 sq. ft.

100 lbs. .... \$2.00 | ½ ton ..... \$18.00  
Ton ..... \$35.00

### SCOTCH SOOT (Imported)

This material imparts a rich dark color to the grass and has a tendency to reduce the growth of weeds and repel injurious grubs and beetles. We import large quantities of this soot from Scotland and are in a position to offer the finest grade available. Apply in the early spring or fall on greens at the rate of 25 lbs. per 1000 sq. ft.

100 lbs. .... \$3.50 | ½ ton ..... \$30.00  
Ton ..... \$55.00

### SHEEP MANURE (Wizard Brand)

Pulverized. Every weed seed killed. Made easy to handle by an extensive process of drying, sterilizing, screening and grinding. Furnishes humus to the soil in addition to its well balanced plant food content. Use at the rate of 1000 lbs. per acre.

100 lbs. .... \$2.75 | ½ ton ..... \$24.00  
Ton ..... \$45.00

### SULPHATE OF ALUMINUM

A chemical used on turf principally to create an acid condition. Rate of application depends on present condition and desired results.

25 lbs. .... \$1.00 | 100 lbs. .... \$3.50

### SULPHATE OF AMMONIA

A chemical source of nitrogen for stimulating growth of grasses and retarding weeds. Analyzes 25% ammonia.

100 lbs. .... \$3.25 | ½ ton ..... \$26.50  
Ton ..... \$50.00

### SULPHATE OF POTASH

This chemical fertilizer has an analysis of 50% potash and should be used judiciously preferably with other fertilizers.

25 lbs. .... \$1.15 | 100 lbs. .... \$3.50

### TANKAGE

A number of greenkeepers prefer Tankage when building new greens. It is rich in nitrogen with a strictly animal base. Apply 1000 lbs. per acre.

100 lbs. .... \$3.00 | ½ ton ..... \$26.50  
Ton ..... \$50.00

### TOBACCO STEMS

These make an excellent covering for the greens to carry them through the winter. Their chief fertilizing element is potash, and in addition, their use repels many insect pests. Packed in bales weighing about 375 lbs.

½ ton ..... \$12.50 | Ton ..... \$22.50

### VIGORO

A balanced plant food, containing in the proper proportion all the essential elements that plants get from the soil. It is clean, odorless, sanitary and easy to use. Contains 4% nitrogen, 12% available phosphoric acid and 4% potash and eight other elements essential to plant life. Use at the rate of 40 lbs. per 1000 sq. ft.

100 lbs. .... \$4.00

Prices for larger quantities on application.



Makes all  
Grass Grow  
to Perfection

## Triple Action Plant Foods For Lawns and Fairways Shrubs, Flowers and Trees

You get added value and greater effectiveness from Wizard Natural Plant Foods because of these three distinctive and important features:

- 1. All Plant Food Elements.**  
Wizard supplies in a safe natural form all the elements needed to make plants thrive.
- 2. Soil Building Humus.**  
Humus is a vital need of all soils and is supplied in abundance by Wizard. Humus is only supplied by Natural Organic Plant Foods.
- 3. Beneficial Bacterial Action.**  
The vast store of plant food locked-up in all soils is liberated and made available to plants by the bacterial action that Wizard promotes.  
Wizard improves the physical condition and puts new life into worn-out soils. It is safe, absolutely weedless and lasting in effect.

Thirty years of use by parks and cemeteries have demonstrated the great value of these weedless manures in developing and maintaining thick, velvety green turf. Wizard Manures bring about a permanent improvement of the physical condition of the soil, encouraging deep root growth. Moreover, these manures are lasting—they release plant food regularly over a long period. Use Wizard in Spring and Fall and put new life and beauty into lawns, fairways, shrubs and trees. Use 100 lbs. to 1,000 sq. ft. of lawn area. Avoid inferior leached-out manures. Insist on Wizard Brand.

Nature's Perfect  
Soil Builders

## Sheep and Cow Manures

STERILIZED    CONCENTRATED    WEEDLESS

# DROUGHT has emphasized The Importance of Deep Growing, Extensive Root Systems in Main- taining good playing turf.

It's been an expensive lesson, but the drought did emphasize the importance of developing deep-growing, extensive roots on the turf of both greens and fairways. While even deep-rooted turf suffered, it remained green longer and made a quicker recovery.

Your feeding program has much to do with the kind of roots the turf develops. Some materials, like nitrogen, stimulate only top growth at the expense of the roots. A balanced feeding program, on the other hand, supplies each of the essential elements needed

in the development of both root and top growth.

Over a period of years Swift has developed a feeding program based on the use of Vigoro, the Complete Plant Food that supplies all 11 vital elements, and Swift's Special Golf Fertilizers. This feeding program is economical and (more important), it gives the desired results! Before you decide on a feeding program, get the facts about the Swift Feeding Program for your course. We'll gladly have a representative call.

## VIGORO

*Complete plant food*

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# MICHELL'S SEED HOUSE

516-518 MARKET STREET

Philadelphia, Pa.

**DON'T FORGET TO WRITE  
YOUR  
NAME AND ADDRESS**

100M-11-36-S-42-1000



for

## PERFECT GREENS

Poor greens, faded in color, spotted, short of root, hard in dry weather, soggy in wet weather or unusually springy, are a great handicap to Clubs and players alike, from the standpoint of increased maintenance and unsatisfactory playing conditions. Aside from improper drainage, such faults can usually be traced directly to the soil, and invariably the answer lies in insufficient soil-building and bacteria-encouraging materials prescribed by Nature. Of these agents, *humus* is most vital.

HYPER-HUMUS has been recognized by leading soil authorities as the *longest lasting*, the *most efficient* and thus the *most economical* source of organic material. Impartial experiments have shown that this material, in comparison with manures, spent mushroom soil and peat moss, is by far the most resistant to decomposition and therefore may be incorporated with the soil in smaller amounts to produce an equivalent effect.

Extracted from native peat deposits, which have been rigidly cultivated for over twenty years, Hyper-Humus is entirely free of weed seeds, is well-rotted and finely ground ready for use. It is a standard product, uniform in quality and may be obtained at any season of the year.

NEW GREENS—The experience of many famous golf courses which give full credit to Hyper-Humus for their excellent turf conditions, is sufficient proof of the value of this material in constructing new greens. Hyper-Humus should be thoroughly mixed with the top 6 to 8 inches of local soil at the rate of 1 to 2 tons per 1000 square feet, depending on the texture of the soil.

TOP DRESSING—Up-to-date greenskeepers have found in Hyper-Humus the *ideal* source of organic material for top-dressing preparations. Finely pulverized, free of any solid matter, weed seeds or fungous disease spores, odorless, and with a pure organic content of over 90% it is far superior and in the long run, more economical than any other top-dressing material.

One part of Hyper-Humus, two of loam and three of sand will make an ideal dressing for average requirements. Variants of this formula will, of course, depend on local conditions.

---

We will be pleased to have a trained *Hyper-Humus engineer* consult with you on soil problems.

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Prices, delivered to destination, will be quoted on request.

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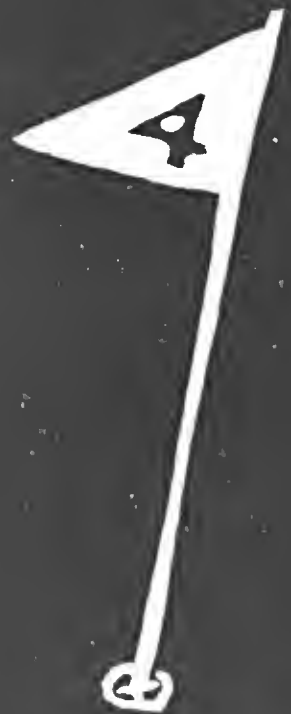
# *Hyper-Humus*

## NATURE'S SOIL BUILDER



# MICHELL'S GRASS SEED

FOR EVERY  
PURPOSE



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