The only thing that has changed is our name. We were Ackley Manufacturing Co., a subsidiary of The Stanley Works. Now, we are Stanley Hydraulic Tools. You'll find the same experienced people at the same address. We offer the same broad hydraulic tool line—the same high standards of product quality. Our generous service and warranty policies are unchanged. And our customers can still count on the most thorough in-field assistance and parts programs in our industry.

A bright new name for a reliable old friend

STANLEY

We think our new name more clearly reflects this total capability. Stanley Hydraulic Tools (formerly Ackley Manufacturing), Division of The Stanley Works, 13770 S.E. Ambler Road, Clackamas, Oregon 97015. Telephone: (503) 659-5660.





Painted designs are worked out and scaled on the drawing board. Here, I use a tape measure to make an accurate field check. Mistakes show up quickly.

### FORWARD PASS

(from page 13)

rect the pH if needed. We usually apply a pre-emergence herbicide such as Balan to help control Poa annua and other weeds.

Mowing begins as early in the spring as the grass starts to grow. We use a Jacobsen Turf King 3-reel mower with a 76 inch cut. This is as much width as we can use and keep flexibility needed in other campus areas. Cutting height in the spring is kept at <sup>3</sup>/<sub>4</sub> of an inch to encourage spreading of the turf. By keeping a smooth even surface, we avoid the scalping that can result from low mowing.

During the latter part of July we change the cutting height to  $1\frac{1}{2}$  inches for the balance of the season. This is a little high for Bermuda but it encourages the turf to thicken, resulting in a softer more plyable playing surface.

Mowing is scheduled at the rate the grass is growing so as not to remove too much leaf surface. Every time weather delays the mowing, and more than onethird of the leaf surface is removed, we see some brown areas. Even though the brown areas recover rapidly, we try to avoid the problem.

Grass is not as competitive as the weedy plants and that is why we spray at least three times during the growing season to control such pests as crabgrass, crowsfoot, knotweed, and chickweed. We usually mix Trimec and MSMA to get the best control of broad-leaved and narrowleaved weeds in Bermuda. The chemical selected depends on the grass being treated.

We have found that a surfacant such as Di-Aqua is very important in getting better coverage and control. It makes the water wetter by breaking down the particles to spread the chemicals more evenly.

With the Myers 200 gallon sprayer and 20 foot boom we can cover the 1¼ acre field in nine passes. We apply all liquid products with this sprayer by just changing the spraying tips. As to application rate, we follow the labels and that is the best recommendation for use of any chemical.

In the last three years we have not used either a fungicide or an insecticide. We watch for disease and insect damage, but none has been



Practice on the field by the majorettes and the band is restricted. We want to limit the damage that a foot can do when it continues to step into the same spot. These girls find the Bermudagrass much to their liking, however.



Terry Turner, my assistant, has the fine hand of an artist when it comes to spraying. He's working on a goal design here. Turf in the back is natural color.

serious enough to justify treatment. We realize that the disease and insect problem is different with each growing season, consequently we are always on the alert for any signs of trouble.

#### GRASS IS STILL OUR CHOICE

September ends all maintenance except mowing and game preparations. October brings the showperiod which is the reason for the total effort. The football season is concentrated in October and November. The R.O.T.C. uses the field over a six week period in the fall to practice marching formations. The only other use allowed on the field is band practice one time before each game.

We have proved that live turf can satisfy our needs for beauty and utility and our annual costs are less than the interest would be for an investment in artificial turf. It has been estimated that an expenditure of approximately one half million dollars would be required to put artificial turf on our field. At the current rate of interest, the interest on that amount of money would more than pay the maintenance cost on our live turf.

# FERTILIZE TREES IN ONE THIRD THE TIME AND ABOUT HALF THE COST USING JOBE'S TREE FOOD SPIKES,

Here's proof when fertilizing a 5" tree:

### Old Method<sup>1</sup>

Bulk 16-8-8 fertilizer-\$70/ton (Average price throughout U.S.)	
2 lbs./inch of trunk diameter = 10 lbs. $\times$ 3.5c/lb. $^{1\!/_2}$ hr. labor @ \$4/hr. Labor and materials	\$.35 2.00 \$2.35
\$2.35 $\div$ 5" tree = 47c/inch of diameter No allowance made for depreciation, amortization, of auger, mistakes, etc.	breakage
<sup>1</sup> Using electric auger.	

Professional tree and turf men who use Jobe's Tree Food Spikes can save 50% and more in labor and materials.

Recommend the fall fertilization of trees now to your customers. Save time and

### Jobe's Tree Food Spikes Method<sup>2</sup>

5 spikes 16-8-8 fertilizer—22c/spike	
1 spike/inch of trunk diameter 5 min. labor @ \$4/hr. Labor and materials	\$1.10 <u>.33</u> \$1.43
\$1.43 $\div$ 5" tree = 29c/inch of diameter, based on 20 case order.	
<sup>2</sup> Based on results of university field tests and recomme	endations.

money by using Jobe's Tree Food Spikes. Order from your local supplier-or write for his name.

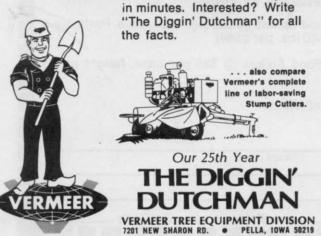
now to your customers.	
STATES No. 199	International Spike, Inc., 462 East High Street
	Lexington, Ky. 40508
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	To: Jobe's Tree Food Spikes 462 East High St., Lexington, Ky. 40508
the Pass	3 cases Tree Food Spikes @ \$30 per case, f.o.b. Paris, Ky. (105 spikes—40 lbs. per case)
()JJJ	12 cases Tree Food Spikes @ \$25 per case, freight pre-
	Name of local supplier
The full	Name
Jush Alter Alter	(Please print) Organization
ulta the future the future to	Street
all And In.	CityStateZip Code

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### Any crew can transplant one tree...but only Vermeer Tree Spades transplant a forest

You're looking at the profit end of a lowcost, high-production tree transplanting program—with "The Diggin' Dutchman's" TS-44A Tree Spade from Vermeer. Compare it with a whole crew of laborers and you'll see what we mean. The TS-44A requires no coffee breaks . . . no lunch hours . . . no overtime wages . . . just an occasional tank of gas to keep its hydraulically-operated spades digging, balling and transplanting a forest of trees up to 4" in diameter. Saves you thousands of dollars annually because one man can handle the entire job



# industry people

**PATRICK J. NUSS** appointed manager of employee relations for The Toro Company.

. .

**BERNARD STONEHOUSE**, named manager of contractor marketing services for Toro Irrigation Division. In other company moves **JOHN S. MACLAUGHLIN** joins the company as an irrigation specialist, and **SARA L. ROMSPERT** has been named supervisor for order processing and customer relations.

WARREN G. "SKIP" PURDY III, promoted to vice president and general manager of Foamspray Chemical, Inc. NEAL HARVILLE becomes general manager of the company's new division, Nu-Ag West. His wife is the marketing director. DARRELL KENNEMER appointed sales representative.

FRANK J. PRATT becomes regional sales manager for the Outdoor Power Equipment Division of FMC Corporation. He will be working with distributors in New York, Mass., R.I., Conn., Pa., New Jersey, Maryland, Delaware, Va. and Washington D. C.

WILLIAM A. MILLSON joins Outdoor Power Equipment Division of FMC Corp. as regional manager for Tenn., Ky., North and South Carolina, and Va.

\* \* \*

\* \* \*

**TIMOTHY P. SCHMITT** named to the newly created post of financial analyst for the Outdoor Power Equipment Division of FMC Corporation.

**DR. DONALD B. PFLEIDERER**, becomes sales manager for the professional division of The Bishop Company, a subsidiary of Lebanon Chemical Corporation. He was formerly director of technical services for Agrico's Turf and Garden Products Div.

EDWARD J. CAMPBELL assumes position of senior vice president — agricultural equipment division, J. I. Case Co. He succeeds DONALD C. BLASIUS who resigned to join a New York Stock Exchange Company.

.

FRANK J. PALERMO succeeds Campbell as senior vice president — corporate operations.

**ROBERT STACCHINI** appointed public relations assistant for the agricultural division of American Cyanamid Company.

. . .

**DAVID E. STEWART** becomes manager of industrial products for Sperry New Holland. This is a new marketing organization for industrial products. Other new appointments include: **CHARLES C. ALLENBRAND** to industrial sales manager; **MARTIN HENRIKSEN** to industrial service manager; **HAROLD G. LANDIS** to industrial marketing research manager; **R. MAC REEVES** to product manager for industrial products; **DONALD J. SHAW** to industrial communications and promotions manager; **ROSS B. WILSON** to industrial administrative coordinator; **PAUL E. ROBB** to product development specialist; **HAROLD K. McCAMPBELL** to service analyst.

# Broadleafs controlled controlled positively with maximum safety to sensitive grasses, ornamental shrubs, trees

BROADLEAF WEED control with herbicides has been a hit and miss proposition so long that many find it hard to believe positive control is indeed here at last.

Trimec Turf Herbicides can quickly demonstrate what we mean. Positively.

This patented herbicide combination can be relied on to overcome your worst broadleaf pests, whatever they may be. Trimec alone attacks the whole spectrum of broadleaf weeds, wiping out hard-to-kill species without extra attention or expense.

If you are responsible for maintaining weedfree turf, get on top of your broadleaf problems with Trimec. No other product offers you all these advantages:

- Unequalled spectrum of control
- One application is usually enough
- Minimal chemical dosage required
- Rapidly biodegraded in the soil
- Maximum safety to sensitive turf, trees and shrubs.

Applied according to directions, when weeds are actively growing, Trimec's synergistic punch knocks out toughest broadleafs while making it possible to minimize hazards to



desirable vegetation. The required dosages are so low there has yet to be a single complaint of ornamentals being damaged due to root uptake of dicamba. Likewise, grass species needn't be discolored or damaged using Trimec. In fact, Gordon's "Bentgrass" formulation is recommended for use on sensitive grasses, while the "Fairway" formulation is recommended for all other commercial turf applications.

Trimec's active ingredients – 2,4-D, MCPP and dicamba – are no secret. The real secret to the product's superior performance is the synergistic effect of these compounds in combination. Their weed control effects are remarkably increased. Broadleaf pests resistant to all but overwhelmingly high levels of its individual components respond to Trimec – quickly, consistently and with virtually 100% kill effected.

Just ask anyone who has tried these superior herbicides. Controlling broadleaf weeds without Trimec is simply doing it the hard way. Try Trimec and relax for a change.





### -the most precise grass seeder made

Brillion's Turf-Maker is for you—if you want to seed the finest grass seeds and lawn mixtures with miserly accuracy over large areas. It crushes, seeds and rolls in one pass enables one man to seed up to 50 acres per day without extra help, equipment or seedbed conditioning.

Turf-Maker gives you exclusive Micro-Meter adjustment for an infinite range of seed settings—Brillion fluted rolls, the most accurate seeding mechanism known — and the unique reversible sprockets for a dual range of rate settings. The results: Full, thick stands at up to 50% seed savings over conventional methods. It's the best for sod seeding.

You can order Turf-Maker in 8' and 10' seeding widths. Options include transport wheels for both sizes and 3-point Category II pick-up for the 8' model. Seed better—save more with Brillion. Mail coupon.



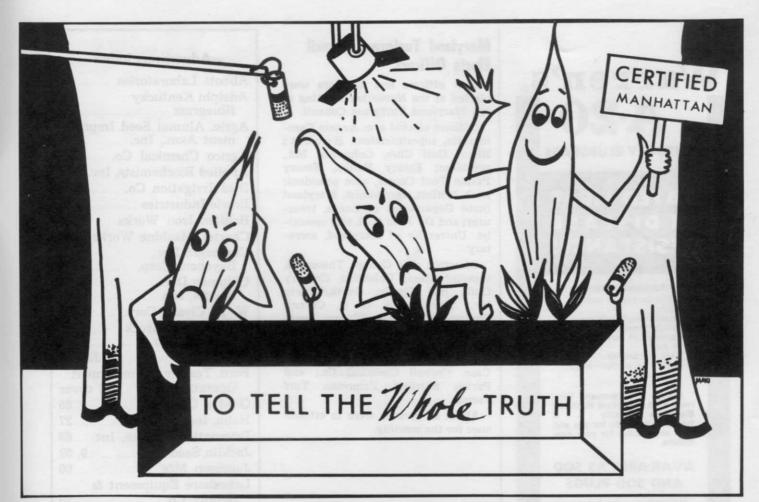
BRILLION IRON WORKS Dept. LS 41-14, Please send me information	on the following:	Y
O New Turf-Maker O Landscape Seeders Name	O Smooth R O Name of ne	ollers earest Brillion dealer
Address		
City	State	Zip LS-135R



## meeting dates

- Ohio Chapter, International Shade Tree Conference, annual meeting, Sheraton Columbus Hotel, Columbus, Ohio, Jan. 27-28.
- Ohio State University Short Course, 45th annual, for arborists, turf management specialists, landscape contractors, garden center operators and nurserymen, Sheraton Columbus Hotel, Columbus, Ohio, Jan. 27-31.
- Associated Landscape Contractors of America, 12th annual meeting, Hilton Palacio Del Rio, San Antonio, Tex., Jan. 28- Feb. 1.
- Lawn and Utility Turf Management, Three-Day Turf Course, Rutgers University, New Brunswick, N.J., Jan. 28-30.
- Penn State Turfgrass Conference, Keller Conference Center, Campus, University Park, Pa., Jan. 28-Feb. 1.
- Winter Seminar for Commercial Arborists, Illinois Commercial Arborists Association and the extension service, University of Illinois, Sheraton O'Hare, Rosemont, Ill., Jan. 29.
- Virginia Turfgrass Conference, Sheraton Motor Inn, Fredricksburg, Va., Jan. 29-30.
- Northern California Turfgrass & Environmental Landscape Exposition. 10th annual, San Mateo County Fairgrounds, San Mateo, Calif., Jan. 30-31.
- Golf and Fine Turf, Three-Day Turf Course, Rutgers University, New Brunswick, N.J., Jan. 30-Feb. 1.
- Penn-Del Chapter, International Shade Tree Conference, annual meeting, Marriott Motor Inn, Philadelphia, Pa., Jan. 31-Feb. 1.
- Nebraska Aviation Trades Association, agricultural seminar, Norfolk, Nebr., Feb. 5-8.
- Midwestern Chapter, International Shade Tree Conference, annual meeting, Stouffer's River Front Inn, St. Louis, Mo., Feb. 5-7.
- American Sod Producers Association, winter conference, Ramade Bourbon Orleans, New Orleans, La., Feb. 7-8.
- Golf Course Superintendents Association of America, 45th International Turfgrass Conference and Show, Anaheim Convention Center, Anaheim, Calif., Feb. 10-15.
- American Society of Consulting Arborists, 8th annual, International Inn, Tampa, Fla., Feb. 14-16.
- National Arborist Association, 36th annual meeting, International Inn, Tampa, Fla., Feb. 14-16.
- Wisconsin Arborist Association, annual convention, Wausau, Wisc., Feb. 20-21. Contact Jerry Koch, city forester, Courthouse, Wausa, Wisc. for details.
- Shade Tree Disease and Insect Short Course, 17th annual, Iowa State University, Ames, Ia., Feb. 20-22. Contact Dr. A. H. Epstein, dept. of botany and plant path., Ia. State Univ. for details.
- Park, Recreation and Environment Design, National Symposium, Carleton House, Orlando, Fla., Feb. 25-28.

66



# WILL THE REAL MANHATTAN RYEGRASS, PLEASE STAND UP!

Manhattan perennial ryegrass is a fine textured perennial ryegrass developed by Dr. Reed Funk, Rutgers University. This new, improved, fine textured grass is genetically pure and great care is taken by Manhattan Association growers who plant only foundation seed stock. The seed is produced by members of the Manhattan Ryegrass Growers Association who agree to strict rules of growing, to protect the crop from cross-pollination and other contaminants.

The seed produced by these growers is closely watched and both field certification and seed certification are required before the seed is released to you, the customer.

Any seed bearing the name "Manhattan" but which does not carry certification tags may not be truly Manhattan. The variance could be drastically untrue of variety.

For your protection - buy only Certified Manhattan; why take a chance on imitations?



PERENNIAL RYEGRASS

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#### Additional Features:

- · Quick to recover from injury
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- Takes short mowing down to . 1/2 inch.
- Easy to care for Greens up earlier-stays green longer.

It pays to recommend Warren's A-20, the finest Kentucky Bluegrass available . . . it means high profits for you and total satisfaction for your customers.

### AVAILABLE AS SOD AND SOD PLUGS

Descriptive color brochure available!

#### **Having a Shade Problem?**

For areas of limited sunlight, WARREN'S® A-34 Kentucky Bluegrass should be considered



WARRENS LAWN FOOD

Used to fertilize the turf of Warren's Turf Nurseries, the worlds largest grower of fine lawns. Still a full 50 lb.

Backed by newspaper cam-paign in all major markets.



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### Maryland Turfgrass Council **Elects Officers**

New officers and directors were elected at the November meeting of the Maryland Turfgrass Council.

Officers elected are: Angelo Cammarotta, superintendent, Hobbits Blenn Golf Club, Columbia, Md., president; Emory Patton, Emory Patton Turf Center, vice president; Dick Moffett, agronomist, Maryland State Department of Roads, treasurer; and Dr. John Hall, turf specialist, University of Maryland, secretary.

Directors are: George Thompson, superintendent, Columbia Country Club; Bill Kirwin, Smith/Kirwin Inc.; Tom Harris, G. C. Cornell Equipment Co.; Alex Watson, Sparrows Point Country Club; Frank Stephens, agronomist, Operators Heat Lawn Maintenance Firm: Cliff Case, Cornell Chemical Co.; and Parker Shirling, Princeton Turf Farms.

About 50 persons were in attendance for the meeting.

### Club Car Of Augusta Ga. Acquired By John-Manville

Club Car, Inc. of Augusta, Ga. has been purchased by John-Manville Corporation for an undisclosed amount of cash, according to a joint announcement

Club Car, Inc. engages in the manufacture and marketing of electric golf cars and resort vehicles.

Annual sales by Club Car, Inc. during the past twelve months were in excess of \$2 million. Primary markets include golf courses and resorts.

William P. Stevens, Jr., President of Club Car, Inc., and other officers and employees will remain with J-M as part of the company's agriturf business.

Seventy-five personnel are presently employed by Club Car, Inc. in Augusta.

Serving worldwide markets, J-M is a major manufacturer of fiber glass, industrial specialties, construction materials, commercial and industrial insulations and pipe and a miner and supplier of asbestos, diatomite, perlite and talc. J-M operations also include lighting fixtures and components, real estate and land development, and environmental control products and systems.

### -Advertisers Index-Adelphi Kentucky Bluegrass Agric. Alumni Seed Improvement Assn., Inc. 21 Agrico Chemical Co. .....BB Applied Biochemists, Inc. 26 Charles Machine Works 25 Chemagro Div., Chipman Div., Rhodia, Inc. 16-17 W. A. Cleary Corp. II Diamond Shamrock Chemical Co. E-Z-Go Car JJ-KK Ford Tractor & Implement Operations ..... 2nd cover International Spike, Inc. ....63 Lakeshore Equipment & Lifetime Career Lofts Pedigreed Manhattan Ryegrass Mobile Aerial Towers, Inc. 26 F. E. Myers Bros. Co. ......11 Outboard Marine Corp. ... EE Rain Bird Sprinkler Mfg. Rudy-Patrick Co. 5 Safety Test and Equipment Sierra Chemical Co. ..... 54-55 The Toro Co., Irrigation Div. SS Uniroyal, Inc. MM Warren's Turf Nursery 28, 68

# Now there's a way to protect the dog

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sprayed with insecticide!

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DIPEL...kills leaf-eating caterpillars as effectively as chemical insecticides, yet is uniquely safe. Won't harm humans, pets, beneficial insects, birds or wildlife.

It isn't easy these days to keep everybody happy. You have to protect trees from destruction by defoliating caterpillars... but do it in a way that doesn't endanger other elements of the environment.

DIPEL can solve your caterpillar problems without causing other problems, including "public relations" problems! DIPEL is a highly selective, biological insecticide. The active ingredient (Bacillus thuringiensis) is a naturally occurring organism. For thousands of years it has been killing leaf-eating caterpillars but leaving desirable creatures alone.





Use DIPEL to control a wide range of worms ... Gypsy Moth, Cankerworms (Inchworms), Webworms, Spanworm, Tent Caterpillars, Bagworms and many others. Put some "peace of mind" into your 1974 spray programs. Specify DIPEL ... wherever you need effective worm control and safety!

It's never been tougher to be a worm.

### I'll Put My LESCO Quality Parts Up Against Toro's and Jacobsen's Anytime—Anyplace



I can save you up to 50% on replacement parts to fit Toro and Jacobsen greens and fairway gang mowers. I take pride in our LESCO parts and have made every attempt to build the finest quality product on the market today. I guarantee LESCO parts to be equal or superior to the parts you are presently using from the original equipment manufacturers. If for any reason you are not satisfied with LESCO parts after a fair trial — call me personally — I WANT to know about it. (216-651-1600)

Sincerely yours ames Fitzgibbon President

P. S. I'll be in Booth #H-71 at the 45th International Turfgrass Conference in Anaheim, California. Stop and compare our LESCO parts and tires in person.

LESCO PRODUCTS is a division of Lakeshore Equipment and Supply Co. of Cleveland and Bloomingburg, Ohio. We are manufacturers, formulators and distributors of parts, chemicals and fertilizers serving the golf course and green industry markets.

( Check your latest invoice and fill in. )

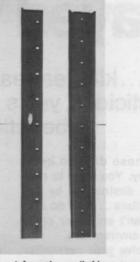
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- 2. LESCO double edge bed knives \$12.95 fits Toro fairway mower
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### (ALL AMERICAN MADE – GUARANTEED)

We stock thousands of the 150 primary wearing parts of Toro and Jacobsen greens and fairway gang mowers. Over 10,000 bed knives are now in stock awaiting your order. We will process your order the day it is received.

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