"The sales force is always busy," White says. "We have a lot of office meetings and critique our work of the past year."

With no revenue coming in, it is a little risky keeping people working throughout winter. But White says in the relatively mild Georgia climate, the crew can usually work on the land.

James Huggett, owner of Long Island Farm, Inc., Marshall, WI, does not have to worry about mild winter days to work on the land. After he finishes fall fertilizing and fitting—leveling, grading, and installing surface drains—it is time for shop work.

Huggett's crew cleans, repairs, and paints mowers, plows, harrows, rototillers, and sweepers as well as sharpens mower blades. Important to check are things like bearings and other small items which have given the crew problems during the growing season.

Since most of Huggett's crew are migrant workers, they will return to Texas in late November. Regional conferences begin in December and Huggett will attend as many as possible to supplement his knowledge.

#### Scientists find that substances in fescue inhibit other plants

Future varieties of tall fescue may grow more compatibly with birdsfoot trefoil or red clover than present varieties of fescue do. That's because researchers now are focusing on a phenomenon called allelopathy.

Allelopathic substances, or plant compounds known as allelochemics, can inhibit growth of other plants and animals. Agronomists Elroy J. Peters and Arthur G. Matches of the USDA's Science and Education Administration and their University of Missouri, Columbia, colleagues have found that breeding lines of tall fescue differ in their allelopathic powers.

The research team has used water to leach allelochemics from leaves of fescue lines, providing crude extracts for a variety of experiments. "Extracts from fescue foliage sampled from June through September are less potent than extracts from January through May samples," Peters says. "We've also found that nitrogen fertilization increases the allelopathic effects of tall fescue."

In one experiment, the scientists treated red clover seeds and birdsfoot trefoil with extracts from six tall fescue breeding lines. Within two weeks, only 41 to 56 percent of the treated clover seeds germinated, depending on which extract was applied, while 82 percent of nontreated seeds germinated. Germination of treated birdsfoot trefoil seeds ranged from 29 to 53 percent while the nontreated seeds' germination percentage was 66.

Peters says that the allelopathic effects of fescue may also be used to develop future varieties of fescue which may inhibit the growth of crabgrass. Some scientists have suggested that weed-inhibiting allelochemics might also confer to plants some resistance to disease and insects.



Write 134 on reader service card

## WT&T EVENTS

The current issue of WEEDS TREES & TURF carries meeting dates beginning with the following month. To insure that your event is included, please forward it, 90 days in advance, to: WEEDS TREES & TURF Events, 757 Third Ave., New York, NY 10017.

Western Association of Nurserymen, Trade Show and 91st Annual Meeting, Hilton Plaza Inn, Kansas City, MO, Jan. 4-6. Contact Ed Gray, Executive Secretary, Western Association of Nurserymen, 2215 Forest Lane, Kansas City, KS 66106, 913/236-5203.

Maryland Turfgrass 81, Educational Conference & Trade Show, New Baltimore Convention Center, Baltimore, MD, Jan. 5-7. Contact John Strickland, President, 11412 Pulaski Hwy., White Marsh, MD 21162, 301/335-3700.

Indiana ISA chapter meeting, Atkinson Hotel, Indianapolis, IN, Jan. 6-8. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2032. The Irrigation Association Short Course, Rochelle Park, NJ, Jan. 6-8. Contact The Irrigation Association, 13975 Connecticut Ave., Silver Spring, MD 20906, 301/871-1200.

**Residential Landscape Design Short Course II,** Fisher Auditorium, Ohio Agricultural Research and Development Center, Wooster, OH, **Jan. 7-9.** Contact Fred K. Buscher, Area Extension Agent-Landscape Horticulture, Administration Building, OARDC, Wooster, OH 44691.

**Institute for Agricultural Irrigation,** California State University, Fresno, CA, **Jan. 5-16.** Contact the Irrigation Association, 13975 Connecticut Ave., Silver Spring, MD 20906.

Midwestern ISA chapter meeting, Sheraton O'Hare, Rosemont, IL, Jan. 11-13. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2032.



North Carolina State University Agricultural Chemicals School, McKimmon Center for Extension and Continuing Education, Raleigh Campus, Jan. 12-13. Contact A.D. Worsham, Chairman, Program Committee, Department of Crop Science, Box 5155, Raleigh, NC 27650.

Southeastern Pennsylvania Turf School & Trade Show, Westover Country Club, Jeffersonville, PA, Jan. 13-14. Contact Dr. William H. White, Philadelphia County Cooperative Extension Service, SE Corner Broad & Grange Streets, Philadelphia, PA 19141, 215/424-0650.

27th Rocky Mountain Regional Turfgrass Conference, Lory Student Center, Colorado State Univ., Ft. Collins, CO., Jan. 15-16. Contact Jack D. Butler, Dept. of Horticulture, Colorado State Univ., Fort Collins, CO 80523, 303/491-7070.

The New Hampshire Turfgrass Conference, Sheraton-Wayfarer Motor Inn, Bedford, NH, Jan. 15-16. Contact Dr. John M. Roberts, Extension Specialist, Turf, Dept. of Plant Science, Nesmith Hall, Univ. of N.H., Durham, NH 03824, 603/862-1200.

Mid-America Horticultural Trade Show, Hyatt Regency Hotel, Chicago, IL, Jan. 16-18. Contact Mid-Am, 4300-L Lincoln Ave., Rolling Meadows, IL 60008, 312/359-8160.

**New York Arborists ISA** chapter convention, Marriott Inn, East Syracuse, NY, **Jan. 18-20.** Contact Margaret Herbst, Executive Secretary, New York State Arborists, ISA Chapter, 230 Park Avenue, New York, NY 10017.

Basic Short Courses in Horticulture by the California Association of Nurserymen and Univ. of CA, Brentwood Theater, Veterans Administration, West Los Angeles, CA, Jan. 20 & 27 and Feb. 3, 10, & 17; Buena Park Hotel, Buena Park, CA, Jan. 21 & 28 and Feb. 4, 11, & 18; Rancross Square, Riverside, CA, Jan. 22 & 29 and Feb. 5, 12 & 19. Contact Ed McNeill, Registration Coordinator, Horticultural Education Fund, 1000 Concha St., Altadena, CA 91001, 213/798-1715.

The Irrigation Association Short Course, Kansas City, MO, Jan. 20-22.

Contact the Irrigation Association, 13975 Connecticut Ave., Silver Spring, MD 20906, 301/871-1200.

Western Pennsylvania Turf & Grounds Maintenance School & Trade Show, Howard Johnson Motor Lodge, Monroeville, PA, Jan. 20-22. Contact Philip L. Sellers, Allegheny County Cooperative Extension Service, 311 Jones Law Building Annex, 311 Ross Street, Pittsburgh, PA 15219, 412/ 355-4275.

Southern Weed Science Society 34th Annual Meeting, Dallas Hilton Hotel, Dallas, TX, Jan. 20-22. Contact John R. Abernathy, Secretary-Treasurer, Texas Agricultural Experiment Station, Route 3, Lubbock, TX 79401.

Virginia Turfgrass Conference and Trade Show, John Marshall Hotel, Richmond, VA, Jan. 20-22. Contact John R. Hall, III, Extension Specialist, Turf, VPI & SU, 426 Smyth Hall, Blacksburg, VA 24061, 703/961-5797.

Fourth Annual Mid-Atlantic Agricultural Chemical and Equipment Trade Show by The Virginia Pesticide Assoc., the Richmond Arena, Richmond, VA., Jan. 21 & 22. Contact Mrs. Nora Pankey, P.O. Box 7494, Hollins, VA 24019, 703/992-1100.

Fourth Annual Mid-Atlantic Agricultural Chemical and Equipment Trade Show of the Virginia Pesticide Assn., Richmond Arena, Richmond, VA, Jan. 21-22. Contact Mrs. Nora Pankey, P.O. Box 7494, Hollins, VA 24019, 703/992-1100.

**Ohio ISA** chapter meeting, Columbus, OH, **Jan. 25-27.** Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2032.

Park and Recreation Maintenance-Management School, Wilson Lodge/ Oglebay Park, Wheeling, WV, Jan. 25-29. Contact Alice Strickland, North Carolina State University, Div. of Continuing Education, P.O. Box 5125, Raleigh, NC 27650, 919/737-2261.

The 1981 Cents Show, Ohio Center, Columbus, OH, Jan. 26-29. Contact for exhibiting, call collect 614/890-5688.

GCSAA International Turfgrass Conference and Show, Convention Center, Anaheim, CA, Jan. 25-30. Contact Palmer Maples, Director of Education, National Golf Course Superintendents of America, 1617 St. Andrews Dr., Lawrence, KS, 66044, 913/841-2240. Professional Turf and Landscape Annual Conference, Tappan Zee Inn, Nyack, NY, Jan. 28. Contact Frank Claps, 136 Laurel Ave., Larchmont, NY 10538, 914/834-6846.

Landscape/Garden Center Management Clinic, Galt House, Louisville, KY, Feb. 1-4. Contact Ray Brush, Administrator, National Landscape Association, 230 Southern Building, Washington, DC 20005, 202/737-4060. **26th Annual Southwest Park and Recreation Training Institute**, Lake Texoma Lodge, Kingston, OK, **Feb. 1-4.** Contact James W. Kitchen, Institute Director, Texas Tech Univ., Dept. of Park Administration & Landscape Architecture, P.O. Box 4169, Lubbock, Texas 79409, 806/742-2858.

The Irrigation Association Short Course, Lubbock, TX, Feb. 3, 4 & 5. continues on page 55

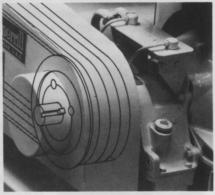


Applying engineering designs which "Sound Conditioned"\* our industrial scrap reduction machinery, Mitts & Merrill can modify our brush chippers for low noise levels. At the same time, those engineering features which have made Mitts & Merrill the leader for years have been retained.

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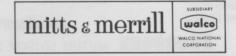


Staggered knife pattern, for years a Mitts & Merrill feature, has always resulted in a lower noise level. First, by segmenting the noise source. Second, through smoother cutting action. Third, by producing smaller chips.



**Optional torque converters** and the heaviest steel cylinder — even without an external flywheel — combine to give positive cutting action under the most rugged conditions. Isolates the engine from shock. Minimizes maintenance.

Plus • Positive safety-lock pin for greater operator safety • Swing-away, folding feed chute protects cutting chamber; allows instant access and increases maneuverability • Heavy duty construction includes coil spring, torsion-type suspension, and box tubular steel frame.



Dept. WTT 52, 109 McCoskry St., Saginaw, Michigan 48601

Write 125 on reader service card DECEMBER 1980/WEEDS TREES & TURF 53



### Compact Self-Propelled Sprayer High Flotation Protects Turf. Optional Spreader, Utility Bed, Hand Spray

For golf greens, grounds, lawn care and Ag uses. Fast, precision spraying of herbicides, insecticides, and liquid fertilizer. Compact size for maneuverability, yet it has 160 gal. polytank with patented Hahn jet agitation. 15-ft. 3-section folding boom for 16<sup>1</sup>/<sub>2</sub> ft. coverage. Use all 3 sections or individually.

Centrifugal pump: 100 PSI max., 55 gpm max. Optional Hand Gun for trees, shrubs or brush control.

16 h.p. Kohler cast iron engine. Three-speed transmission. Hydraulic brakes. Automotive type steering.



**HAND GUN** and 25 ft. hose permits spraying trees and shrubs on the move. Optional.

**BIG HIGH FLOTATION TIRES** Reduce compaction. Drive on golf greens safely. About half the PSI of other utility trucks and sprayers.

4-WHEEL STABILITY Low center of gravity. For more stability and safety.

FAST, WIDE COVERAGE

**STEEL UTILITY BED** Optional. Converts sprayer to Utility Truck. Complete with sides and drop tailgate.



**CONVERTS TO PRECISION SPREADER** Pendulum action spreader for more accurate pattern than any other method. Spreads 1000 lbs. of sand for top dressing over a 3000 sq. ft. area in two minutes — 12 ft. swath. Also spreads fertilizer, seed, or lime — 20 to 45 ft. swath. Powered by auxiliary drive from vehicle engine. Capacity — 1000 lbs. of sand or 700 lbs. of fertilizer.

DEALERSHIPS AVAILABLE IN SOME AREAS. TELEPHONE (812) 428-2025

AG/TURF DIVISION 1625 N. Garvin St., Evansville, Indiana 47711 33 years of building self-propelled sprayers

#### **Care for contractors**

I would like to see what the contractors have to say in rebuttal to your nine point comments, "Experience" (Philip Huey's article on "Contract Versus Force Account," Oct. issue).

I am from the northern area and probably have different conditions and outlook with only 20 years of experience.

It would seem that Mr. Huey has a very narrow view to the whole problem with emphasis on human relations, legal contracts, and efficiency. He shows little interest to the contractors, their business problems, the amount of work, and their profit, which was limited to a very small gross income ratio to overhead. Also, the scope of their work

#### Events from page 53

Contact The Irrigation Association, 13975 Connecticut Ave., Silver Spring, MD 20906, 301/871-1200.

Wisconsin ISA chapter meeting, Olympia Hotel, Oconomowoc, WI., Feb. 8-9. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2032.

Michigan ISA chapter meeting, Kellogg Center, Michigan State Univ., E. Lansing, MI, Feb. 11-12. Contact Ervin C. Bundy, ISA Executive Director, 5 Lincoln Square, P.O. Box 71, Urbana, IL 61801, 217/328-2032.

A.L.C.A. Annual Meeting & Trade Exhibit, Hyatt Regency Hotel, New Orleans, LA, Feb. 8-13. Contact Associated Landscape Contractors of America, 1750 Old Meadow Rd., McLean, VA 22102, 703/821-8611.

National Arborist Association Annual Meeting, Sarasota Hyatt House, Sarasota, FL, Feb. 15-19. Contact Robert Felix, Executive Vice President, 3537 Stratford Road, Wantagh, NY 11793, 516/221-3082.

Capital Area Turf & Ornamental School, Lancaster Area, Feb. 18-19. Contact Harold E. Stewart, Dauphin County Cooperative Extension Service, 75 South Houcks Street, Suite 101, Harrisburg, PA 17109, 717/652-8460. was limited to your supervision, which lowers the incentive for personal input and ability—a very important aspect to personal pride.

LETTERS

As with most governmental agencies, whether they be local, state, or federal, there is a tendency to treat small business as though they are wealthy and

IT TAKES

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have unlimited funds at their disposal. And have little concern for their considerations.

Frank J. Foster President Dal Corp. Muskego, WI

> Goodall mowers are built to last. All engines used on Goodall's are chosen with the same intentions. One winning combination is the 8 hp, 2-cycle JLO engine on the rugged, dependable 36 inch Goodall mower. In fact, over 60% of the Bunton built 36 inch units sent to Europe last year are JLO powered.

> Goodall self-propelled mowers are also available in 22, 24, 28, 32 and 52 inch sizes, many with optional engines, rider and grass catcher attachments. All are designed and built for low downtime and long life. Call or write for more information.



8 hp, 2-cycle JLO gas engine for extra long service life and low maintenance.

> Extra heavy gauge steel main frame, welded one-piece. Goodall built for durability.

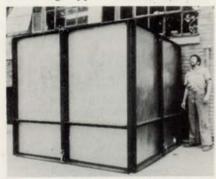
36 inch Mower options: • Lawn, 6" casters • Turf, 11% " casters • Mulching, 11% " casters Engine options: • 8 hp, 2-cycle JLO Gas • 8 hp Acme Diesel • 10 hp Tecumseh Gas • 11 hp Briggs Gas • 16 hp Briggs Gas

World's first direct drive rotary. **GOODDALLL** Division of Bunton Co. P.O. Box 33247 Louisville, KY 40232 U.S.A. 502/459-3810 Telex: 204-340

Write 104 on reader service card

## PRODUCTS

Modular steel tank from ModuTank, Inc. offers permanent or standby storage for indoor/outdoor service and can be rapidly erected and located. A choice of flexible membrane liners, including Hypalon, PVC, CPER, or



XR-5 are available to hold water, oil, and many liquids and corrosive fluids. Called the EconoStor, the tank is rectangular or square and suits light quarters. Components of a 2,000-gallon model will store compactly in 100 cubic feet of space and can be erected by two workmen in four hours. It comes in 12 standard sizes from 500 to 18,000 gallon capacity.

#### Write 701 on reader service card

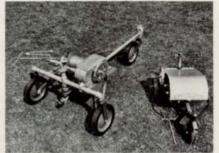
Self-controlled watering planters promote lush, green, and healthy indoor plants through use of a sensor which measures moisture content in the soil and releases the proper amount for a plant. These attractive planters come in a variety of earthtone colors as well as ivory and satin black and in diameters



of 8, 11, and 14 inches. Planter Technology is the manufacturer.

Write 702 on reader service card

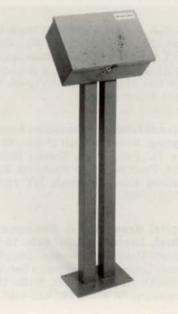
A 10-minute set-up and then automatic travel by windup of a steel cable make this equipment from Travelrain



Power Sprinkler Co. convenient to use. Two models are available: heavy duty (left), which has 500 feet of galvanized cable and covers 140 by 650 feet; and the cub special (right), which contains 300 feet of galvanized cable and covers 80 by 300 feet. They travel in a straight or irregular path, including steep hills, over rough ground, and through tall grass. They work well for athletic fields and large lawns, watering at night when pressure is high and evaporation low.

#### Write 703 on reader service card

**Dual-post pedestal,** model SSRP, works with Weather-matic controller models SSR, CC-10, and SC-10 to wire the automatic controller and valves of the underground lawn/turf irrigation system. Two separate, roomy channels suit 24- and 115-volt wiring. The manufacturer, Telsco Industries, has



# When a turf system needs...

The industry's heaviest epoxy coating — over twice the thickness of conventional coatings

Chevron type gasket gives maximum savings in installation time and cost

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Write 124 on reader service card

made the pedestal posts with heavy gauge, welded steel.

Write 704 on reader service card

**Rheem Manufacturing Co.** offers a high-density polyethylene open head pail that holds 6 gallons. Its one-piece seamless body has a 360° continuous locking lip that mates with a corresponding lip in the cover to keep it tight.



The body has reinforcing ribs that provide added strength and prevent ovaling.

Write 705 on reader service card

**Hydraulic lift table** from Hanson Manufacturing Co., Inc. gets both repairman and small engine equipment off the floor for better visibility and leverage. The 2,000-pound lift capacity of the heavy-duty ram will lift lawn mow-



ers, yard and garden tractors, snowmobiles, motorcycles, snow blowers, rototillers, and golf carts. The allwelded angle base frame and <sup>1</sup>/<sub>8</sub>-inch steel platform will support it rigidly while you work.

#### Write 706 on reader service card

**One application of "the unique feeder,"** a controlled release fertilizer packet for new and existing plantings, provides nutrients for three years when placed near roots of trees, shrubs, roses, or evergreens. The sealed



polyethylene bag contains a water soluble 16-8-16 fertilizer which slowly releases nutrients through micropore holes in the soil. Unique Fertilizers, Inc. manufactures it.

Write 707 on reader service card

The UT 40 large-capacity trailer has been added to the line of trailers from Miller Tilt-Top Trailer, Inc. It has a 24,000-pound capacity at 50 mph and hauls many types of construction *Continues on page 60* 

### Use Panasonic's New Lightscope to Assist in Insect Identification and Control.

Panasonic's new hand-held 30X microscope with its own built-in light source is tailor-made for pest control diagnostics and high impact sales presentations in the field.

It's a great little unit! The microscope is compact. Only 5%'' long and folds up into a handy leatherette carrying case. . . small enough to tuck into your pocket.

When you are ready to use it, simply unfold the scope and its AA batterypowered light source comes on. The lamp even has a blue filter to give you a sharper, more vivid image!

Want to make a really accurate diagnosis of exactly which species you're up against? Want to show your customer what their pest problem really looks like? The P.C.O.'s POCKETSCOPE will prove to be a valuable tool indeed!

Just place the lens over the specimen; focus the image with the scope's super sensitive thumbwheel and you'll be viewing that little insect 30 times larger than life!

You can place the transparent "chamber" right over a living specimen. The insect cannot escape. You'll be able to watch the insect walk around inside the viewing chamber. It will always be in sight. Your P.C.O.'s POCKETSCOPE will give you the necessary magnification to count antennae segments or leg segments where these factors determine identification of the species.



#### Panasonic FF-393 Microscope with Light

The POCKETSCOPE is the perfect tool for sales demonstrations with a high degree of professionalism!

Great, too, for accurate identification when sensitive insecticides may be called for.

It's long lasting! The batteries on your pocketscope will never run out because the unit was accidently left on. The scope cannot he put into its carrying case without being refolded. And that turns out the light.

Magnifies up to 30X.	Advantage Distributors 393 First Street Hackensack, N.J. 07601 ORDER BY PHONE - (201)	NO RISK 30-DAY MONEY BACK GUARANTEE
	Please fill my order for P.C.O. Pocketscopes @\$39.95 (Price includes batteries). Add \$2.50 postage & handling. NAME	
	I am not completely satisfie	y will be promptly refunded if d.
	VISA • AMERICAN EX	PRESS • MASTERCHARGE

## NEW SEVIN<sup>®</sup> SL. IT'S EASY TO USE & EASY TO LIVE WITH.

ANTHEADOWS WAY, JACKSON PRODUCTS COMPARENT, INC.

Convenience. New SEVIN® SL carbaryl insecticide really pours it on. For you, that means convenient, easy handling. Because SEVIN SL is a water-based liquid that's a snap to measure and mix. Clean-up's easy, too. SEVIN SL comes in light-weight 2½ gallon jugs, so it's easy to pick up and pour. And for bigger jobs, it also comes in 55 gallon drums.

up and pour. And for bigger jobs, it also comes in 55 gallon drums. Like other SEVIN carbaryl formulations, you can combine new SEVIN SL with most any fungicide, miticide or insecticide. Or use it alone to control 119 pests that attack trees, shrubs, flowers and turf.

SEVIN SL is convenient for people who use your grounds, too.

As soon as SEVIN SL spray dries, they're free to enjoy the area. Because, compared to other insecticides, biodegradable SEVIN SL ranks low in toxicity to people, animals, birds and fish. And it leaves no lingering harsh ordor. Get confidence—and convenience—with new SEVIN SL.

For more information about SEVIN SL and SEVIN 20% Bait-a new formulation for cutworms and mole crickets-contact your pesticide supplier.



SEVIN is a registered trademark for carbaryl insecticide. As with any pesticide, always follow instructions on the label. Union Carbide Agricultural Products Company, Inc., 7825 Baymeadows Way, Jacksonville, FL 32216

#### Products from page 57

equipment on its dual wheels and tandem axle. Its platform measures 19 feet,



6 inches long, including beavertail, and is only 31 inches off the ground. This low center of gravity gives a more stable haul with less sway at highway speeds. Transverse 2-inch oak planking on the deck and beavertail provides lateral support to side members. A 1/4-inch thick diamond-patterned safety plate covers the wheels.

Write 708 on reader service card

A special purpose building of various sizes can provide a controlled environ-





ment of temperature, humidity, and sound. These Bally Case & Cooler systems have flexible design, sturdy construction, and excellent insulation of R 34. The company provides free design and engineering, mechanical systems consultation, and on-site, on-time delivery.

Write 709 on reader service card

Cozy Cabs from Custom Products are now available for Ford 1000 series tractors, two- and four-wheel drive models. ROPS-tested to meet OSHA requirements, the cabs feature all-steel construction, rubber insulated mounts,



and vinyl-padded interior. They are color matched to the Ford tractor and are easy to assemble and install. Manufacturer also makes cabs for other companies' tractors.

Write 710 on reader service card

A pressure regulator for watering systems will protect complete watering systems, fertilizer injectors, and PVP pipes and tubing. The regulator re-



duces inlet pressures up to 200 psi down to a safe, pre-set 45, 30, or 20 psi. Gustafson, Inc. has built it with durable brass, 31/8 inch long by 11/4 in diameter, at a weight of 8 ounces.

Write 711 on reader service card