

Eye-catching display of the Azo Chemical Co., Canton, Ohio, was built with less than \$100 in materials, according to L. A. Smith, Azo's president. His wife, Mrs. Joan Smith, is shown with literature distributed at the recent Canton Home Show. Booth, which is on display at similar meetings, county fairs, and so on, is featured at the firm's office or warehouse when not in use. "Our display has given us more attention than any other advertising we've done," Smith is convinced.

### Hercules Has No-Drift Sprayer

A new spray system, claimed to eliminate drift in commercial application of hormone-type herbicides, has been announced by the Hercules Powder Co., under the name Rhap-Trol system.

Rhap-Trol system deposits a mayonnaise-thick emulsion in a rigidly controlled area, even in winds up to 20 mph, company spokesmen claim. This placement of spray material thus makes for maximum economy of operations, the firm adds.

Contract applicators will be able to license the system from Hercules, for spreading weed- and brush-killing herbicides on rightsof-way along railroads, highways, power lines, and in areas adjacent to susceptible crops.

Spray applicators can be mounted on helicopters, airplanes, or truck booms, and a special handgun applicator has also been developed, according to Hercules. Material is sprayed in particles sized small enough to obtain desired coverage, and yet large enough to minimize drift, the manufacturer reports.

For more information on the new spray system, write Hercules Powder Co., Inc., Hercules Tower, 910 Market, Wilmington 99, Del.

## Freeman Explains Federal Law To Pesticide Use Investigators

In his statement before the Senate Subcommittee on the control of pesticides and other chemical poisons, Secretary of Agriculture Orville Freeman described how present federal laws protect the public. He appeared as an expert witness at hearings of the Ribicoff committee formed after President Kennedy was given the report by his Science Advisory Committee on pesticides.

"Federal law requires scientific proof that a pesticide is safe before it can be sold across state lines," Freeman explained. "It also places definite restrictions on the use of pesticides in food production... This is how it works:

"A company seeking registration of a new pesticide applies to the Department of Agriculture for registration of its product. It must submit exhaustive data supporting its claim that the compound is safe and effective for specified purposes.

"This data is evaluated by Department scientists. They ask for more proof if they feel they need it.

"If evidence indicates that the proposed pesticide would leave a residue on food or feed crops, or in meat, the Department refers it to the Department of Health, Education, and Welfare's Food and Drug Administration, which is responsible for determining the level at which these residues are safe.

"The applicant company must then apply to FDA to set a tolerance — that is, the maximum safe amount of residue of the chemical that will be legally permitted to

## Literature you'll want...

Here are the latest government, university and industrial publications of interest to contract applicators. Some can be obtained free of charge, while others are nominally priced. When ordering, include title and catalog number, if any. Sources follow booklet titles.

Controlling Insects and Diseases on Ornamental Trees, Bulletin E269, 1961, Agricultural Experiment Station, Michigan State University Bulletin Office, P.O. Box 231, East Lansing, Mich.

Weeds of the Northeast, Aids to Their Identification by Basal-Leaf Characteristics, Field Manual No. 1, University of Delaware, Agricultural Experiment Station, Newark, Del.

Torpedograss and Citrus Groves, Bulletin S-136, University of Florida Agricultural Experiment Station, Gainesville, Fla.

Lawn Care, 12 p. il., Bulletin 3-624, O. M. Scott & Sons Co., Marysville, Ohio.

Chlorosis of Trees and Shrubs, Bulletin BP-2-3, 1959, Agricultural Publications Office, Agricultural Experiment Station, Purdue University, Lafayette, Ind. 5¢

Ethylene Dibromide for Control of the European Chafer, Catalog No. ARS-33-71, 34 p., Agricultural Research Service, U.S. Department of Agriculture, Washington 25, D.C. Russian Knapweed, Bulletin L-45, 1962, University of Wyoming, Agricultural Extension Service, Laramie, Wyo.

Control of Aquatic and Ditchbank Weeds, Bulletin X-158, University of California, Agricultural Experiment Station, Berkeley 4, Calif.

Pest Control Program for Home Orchards and Small Fruit, Folder F-17, 1961, Agricultural Experiment Station, Michigan State University Bulletin Office, P.O. Box 231, East Lansing,

Guide to More Beautiful Lawns and Gardens, 24 p. il., Armour Agricultural Chemical Co., Atlanta, Ga.

Lawn Insects and How to Control Them, Home & Garden Bulletin No. 53, Office of Information, U.S. Department of Agriculture, Washington 25, D.C.

Fungicides for Shade Trees, Bulletin BP-2-11, Agricultural Publications Office, Agricultural Experiment Station, Purdue University, Lafayette, Ind. 5¢

Soil Testing, Bulletin 239, University of Florida Agricultural Experiment Station, Gainesville, Fla.

Some Grasses of the Northeast, A Key to Their Identification by Vegetative Characteristics, Field Manual No. 2, Agricultural Experiment Station, University of Delaware, Newark, Del.

Oak Wilt, Bulletin BP-2-6, Agricultural Publications Office, Agricultural Experiment Station, Purdue University, Lafayette, Ind. 5¢ remain in or on food products in interstate commerce. Normally, an FDA tolerance is set at 1/100th of the amount found safe in the most susceptible test animals.

"If the manufacturer proves that his product meets the tolerance requirements, and if he convinces the Department of Agriculture that it is safe and serves a useful purpose — then we are ready to grant registration.

"Before registration is granted, however, the manufacturer must obtain the Department's approval of the label to be used on the product. The requirements for labeling are rigid and comprehensive. Labels must clearly state what the product is, what it is made of, what it can be used for, what its dangers are, what safety precautions must be observed in using it, and the name and address of the responsible company.

"The Department follows through by spot-checking pesticides offered for sale at wholesale and retail levels, to determine they are properly registered and that labeling requirements are in fact being met."

## -Trimmings-

New crop coming up. In May this column included an item about the need for educated personnel for the outdoor spraying industry, and we've been musing about the fact that each June brings a whole new crop of horticulturists into our field. With this thought in mind, we were pleased to have a note recently from George D. Newell, a college student from Columbia, Mo., who does contract maintenance in the summers, and who is planning to open a complete garden center upon graduation. George has some kind things to say about W&T, and we hope he'll keep us informed of his progress after he leaves the campus.

Tree service branches out. We frequently comment on the obvious trend today of rounding out the services of companies which participate in one facet or another of vegetation management. Turf people get into weed control; brush control companies eye turf fertilization; tree "surgeons" go after lawn insects. This is as it should be, we believe, because it is really one industry with a variety of services to be offered. As a further example of our conviction, we offer comments from E. L. Parker, who runs Parker Tree Service in Peterborough, N.H. Mr. Parker writes that his tree service company has been doing brush control for years, but only recently has he considered weed control work. Mr. Parker also offers tree fertilization, and this has led him, he writes, to an interest in turf work, too. No doubt opportunities abound in the highly cultivated New Hampshire countryside, with its lawn-conscious New England towns!

Grace grows grass. Anyone who thinks contract lawn service is a minor industry will probably change his mind when he learns that no less a company than W. R. Grace has entered the contract lawn maintenance business. Operating from Grace's Davison Chemical Division, the new consumer-oriented marketing approach is said to enlist local oil dealers as Davison Division applicators. Through Grace's new service, according to an article in Chemical Week for April 27, consumers may choose any part, or all, of a three-stage program which includes application of crabgrass, insecticide, and fertilizer chemicals. Apparently this new entry into lawn service competition is still in its test-market stage, but it's a good indication to CAs everywhere just how important this industry is!

More from the East. Another Easterner who has written us is Anthony R. Quatrone, of Antone Landscape Co. in Union, N.J. Tony says his "grounds maintenance" firm applies selective and nonselective weedkillers on parking lots, driveways, fences, and lawn areas, and that he has 50 residential and industrial accounts which range in size from 50 x 100 ft. to 20 acres! Obviously no piker, Mr. Quatrone is no doubt kept very busy by this formidable array of contracts, and we're very pleased he took time to write us!

DC sparks CAs. Speaking of businessbuilding, livewire applicators are quick to realize that all the Washington hoopla about pesticide hazards is just one more good selling point to convince customers of the need for skilled, professional applicators!



for treatment and maintenance of fine turf



CHEMICAL SALES COR



These specialty products, developed specifically for golf course and park use, are now available for the treatment and control of fine turf grasses. VICHEM research in agricultural chemicals has produced such outstanding developments as DSMA—DiSodium Methyl Arsonate; AMA—Ammonium Methyl Arsonate; CPA—Calcium Propyl Arsonate; CALAR— Calcium Acid Methyl Arsonate.

. . . the finest chemicals to protect your finest turf.

#### FUNGICIDES

LIQUIPHENE 10% & 33%% (PMA)
THIURAM 75 (Thiram 75%)
VI-CAD (Cadmium Chloride)
THIURAM M (Thiram-Mercury)

Distributor Inquiries Invited



#### HERBICIDES

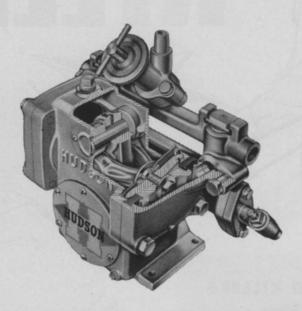
 for Crabgrass and weed control CRAB-E-RAD (Powder) DSMA SUPER CRAB-E-RAD (Liquid) AMA SUPER CRAB-E-RAD + 2 (Liquid) AMA + 2,4,D SUPER CRAB-E-RAD (Calar) CRAB-E-RAD 30 (Liquid) DSMA

\* for Dallis grass control
DAL-E-RAD 100 (Powder) DSMA
SUPER DAL-E-RAD (Liquid) AMA
SUPER DAL-E-RAD + 2
(Liquid) AMA + 2,4,0
DAL-E-RAD 30 (Liquid) DSMA

VINELAND CHEMICAL SALES CORPORATION

Manufacturing Plants: Vineland, New Jersey = Palmer, Puerto Rico

No gears.
No sliding pistons.
No connecting rods.
No packing, no cups.
No greasing or oiling.
No exposed working parts.



# Almost nothing to wear, break or chip in the New Hudson TEN-O-MATIC\* sprayer pump

Would you like to have a power sprayer that's ready to spray—without delay—whenever you are?

With a pump built to cut timewasting stops for service, repairs?

Get all this *now* in a Peerless\* sprayer with TEN-O-MATIC pump.

Best of all, you'll like what you don't get—trouble. No unneeded, wearing parts. No extra weight or size.

Store your grease gun and oil can. You won't need them. The TEN-O-MATIC pump transmission operates in a complete oil bath—like

your car. You change oil only every 100 hours.

You can spray tough materials such as DDT, whitewash, wettable powders—without worrying about scoring pistons, wearing out cups. Spray chemicals come in contact

only with materials highly-resistant to corrosion — stainless steel, cast iron, nylon and Ni-Resist. And tanks come with stainless steel or ENDURALL\* liners.

How about pump efficiency? You can hold constant volume at any pressure up to 400 lbs without drop off from slippage or leakage.

Output? Up to 10 gallons a minute—enough for 2 double-nozzle guns.

Ask your dealer to get you more information about Peerless sprayers with TEN-O-MATIC pumps. Or write us.

Peerless, with TEN-O-MATIC, in 150, 200, 300-gal sizes. Others, 10-300 gallons, 1½-5 gpm pumps.

© 1963 H. D. H. Mfg. Co.

SIGN OF THE BEST BUY



H. D. HUDSON MANUFACTURING COMPANY 589 E. Illinois St., Chicago 11, Illinois

Serving you with a complete line of hand and power sprayers and dusters