

Each row is fitted with a front "bumper" sponge which is wetted with water so it'll conduct electricity.

## "ABSOLUTELY THE CHEAPEST WAY TO CONTROL JOHNSONGRASS"

# New Spot Sprayer Turns On, Off Automatically

"It's absolutely the cheapest way to control Johnsongrass," says J.C. Allen, inventor of a new electronically-operated spot sprayer designed especially for farmers wanting to use Poast or Fusilade to kill tall-growing weeds in row crops.

Key to the sprayer's fast-acting operation is its ingenious electric system. Each row is equipped with a front "bumper" sponge. When you go to the field, you hose down these sponges with water to make them better conductors of electricity. When a wet "bumper" hits a weed, electricity flows from the tractor's battery, through the wet sponge, through the weed and to ground, from ground to a chain dragging on the ground behind the tractor, up through the chain and through the tractor frame and to three transistors which amplify the current enough to trigger a solenoid which, in turn, turns on three spray nozzles covering that particular row.

With the tractor going about 6 mph, the electronic system is timed so the three nozzles saturate the weed with spray. A built-in delay holds the spray on for .4 of a

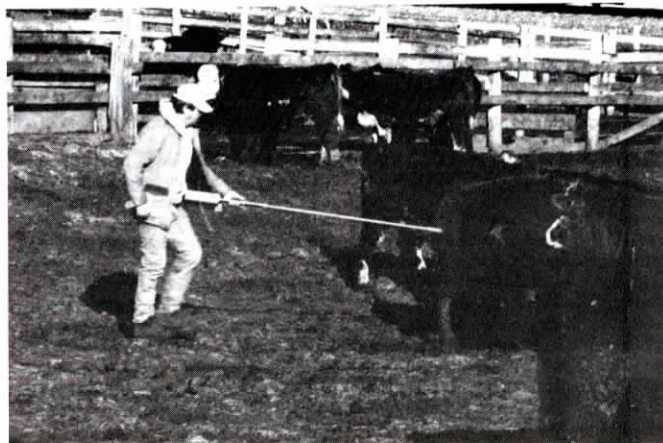
second - about 5 ft. of travel - to ensure that the plant's completely covered with spray before the nozzles shut off. For broadcast application of preplant herbicides or pesticides, you simply hit the manual override switch to do conventional spraying.

The sponge bumpers will stay wet enough to conduct electricity for several hours. "Generally, when it's time to refuel the tractor, it's time to rewet the sponges," says Allen.

Cost of the sprayer, adaptable to row widths from 15 to 40 inches, is \$2,600 for a six row (40 in. spacing) and \$3,000 for an 8-row, complete with boom and mounting brackets.

"If your herbicide of choice is Roundup, a rub bar wiper applicator will probably do the job. But, for row-crop farmers who prefer using lower cost Poast or Fusilade, this spot sprayer is tailor-made," says Allen.

For more information, contact: FARM SHOW Followup, J.C. Allen, P.O. Box 87, Indianola, Ms. 38751 (ph 601 887-2514, or 887-3356).



The "Cow-Poke" syringe is 75 in. long and weighs 3 lbs.

## FASTEST NEW "GUN" IN THE WEST

# Air-Powered Pole Syringe

"It's the fastest new 'gun' in the west," says Hank Kleinwolerink, Sheldon, Iowa, manufacturer of Cow-Poke, billed as "the world's first air powered pole syringe for treating cattle or hogs without having to remove them from the pen."

"The outstanding feature of this first-of-its-kind syringe is its ability to inject up to 20cc of medication into a critter before the animal reflexes," explains Kleinwolerink, who teamed up with cattleman Dixon Granstra to invent the Cow-Poke.

Equipped with a 20cc Ardes syringe, the Cow-Poke for cattle is 75 in. long (60 in. reach from hand to syringe) and weighs 3 lbs. A shorter "Poke" for hogs is half as long.

The air-powered syringe is available in a "non-adjustable" model which delivers a single dose (up to 20cc) per injection, or in a "Select-A-CC" model (slated for introduction in June or July) with an adjustable screw, allowing you to administer as little as 1cc per injection.

To treat an animal, you simply poke the



needle into the flesh and simultaneously depress a thumb button to "trigger" the air cylinder. "It's all over with before the animal has a chance to reflex," explains Kleinwolerink. "If you've got several animals in a pen that need vaccinating, one person working alone can use the Cow-Poke to treat the entire lot right in the pen without using a chute. You carry it in one hand, and a paint gun in the other to mark each animal as it's treated."

Price tag on the Cow-Poke (long or short model) is \$249 with standard "one shot" syringe; \$279 for the optional "Select-A-CC" syringe.

For more information, contact: FARM SHOW Followup; Cow-Poke Inc.; Dixon Granstra, President; P.O. Box 41; Sheldon, Iowa 51201 (ph 712 324-4928).

## BALE WINCH EXERTS PRESSURE ON "PASSIVE" HYDRAULIC CYLINDER

# Pickup-Mounted Scale For Big Round Bales

"It lets me weigh round bales in the field without getting out of my pickup," says hay broker Al Sherstan, Clyde, Alberta, who built his own pickup-mounted weigh scale using off-the-shelf components for less than \$1,000.

The scale, supported by a framework built from 2 in. dia. pipe, mounts in the bed of Sherstan's 1976 Dodge 3/4-ton Club Cab pickup. A 3-in. stroke single-acting hydraulic cylinder serves as the load cell. One end of the cylinder is connected by cable to an 8,000-lb., battery-powered winch mounted at the front of the bed. The other end is attached to a 3-ft. high vertical lift arm that's connected to a pair of 4-ft. long bale forks spaced 3 ft. apart at the rear of the pickup. A remote switch in the cab activates the winch which raises the bale off the ground, exerting pressure on the "passive" hydraulic cylinder. A single 12-ft. long line runs from the cylinder to a standard pressure gauge in the cab where Sherstan reads the weight.

"As far as I know, this is the first pickup-

mounted weigh scale for round bales," says Sherstan. "It's really handy. Backing up to the bale, sparring and weighing it takes less than a minute and I can weigh bales anywhere. For years I was guessing bale weight and losing money. Whenever I loaded bales on a scale, I found my guess weight was off by up to 200 lbs. I know this scale is accurate to within 50 lbs. or less."

Sherstan calibrated the gauge by stacking fertilizer bags on a fork pallet and reading the hydraulic pressure every 50 lbs. "The length of the arm and the leverage it exerts on the bale are big factors in how much strain is applied to the winch and the cylinder," notes Sherstan. "I had to experiment to get the right size cylinder and lift arm."

The self-contained bale scale slips easily on and off the bed of the pickup when not in use. Sherstan is considering developing the idea commercially.

Contact: FARM SHOW Followup, Al Sherstan, Box 127, Clyde, Alberta, Canada T0G 0P0 (ph 403 348-5642).



Sherstan lifts each bale off the ground with the rear bale forks, which are powered by an 8,000-lb., 12-volt winch. A 3-in. stroke cylinder, mounted in-line between the winch and the bale forks, acts as a load cell (below left). A single 12-ft. hydraulic line runs from the cylinder to a standard pressure gauge in the cab where Sherstan reads the bale's weight (below right).

