



Photo shows original hydrostatic power unit which Soderberg built. Note "left" and "right" hand bottoms mounted front and rear.

## SIX "LEFT HAND" BOTTOMS UP FRONT; SIX "RIGHT HAND" BOTTOMS BEHIND Self-Propelled 2-Way Plow

Swedish farmer Staffan Soderberg, of Holo, has developed a self-propelled hydrostatically driven 2-way plow that's probably the most efficient plowing unit ever built.

When the driver comes to the end of the field, he doesn't even have to turn around. He simply stops the tractor, raises the six bottoms he was pulling, lowers the six bottoms mounted up front, swivels the seat and throws the tractor in reverse.

The power unit is equipped with a hydrostatic transmission using slow-running hydraulic motors, one on each wheel. A 300 hp. Scania diesel engine drives the four adjustable hydraulic pumps. For control purposes, the hydraulic pumps are connected 2 by 2, meaning there are only 2 control units. One pair drives the wheels on the left side, and the other pair drives the wheels on the right. This means that the left-hand wheels and the right-hand wheels can be run independently.

The hydrostatic transmission permits fully variable speed control.

Maximum pulling power is "not less than 11 tons". There are two additional hydraulic pumps for working hydraulics. Steering and working hydraulics for lifting arms and other outlets for implements are fully independent of each other, meaning that the machine can be steered and implements lifted and lowered at the same time.

The cab is mounted in the middle of the tractor, thereby giving the driver a better view and making the machine easier to control. There are 3 controls on the driving seat which is both vertically and laterally suspended, and fully swiveling.

The machine has articulated steering but can also be steered by means of the wheels since they can be run independently of each other on either side (track type steering). Since the plows turn all plow ridges in the same direction, there are no end furrows or ridge strips.

For more details, contact: FARM SHOW Followup, Staffan Soderberg, Helleby Farm, Holo, Sweden.

## MAKES BEDDING GO TWICE AS FAR

# New Straw Chopper Cuts Bedding Cost

"One bale processed in this machine will bed about 30 cows," says Marcel Brisebois, marketing director for the new Chop 'n Bed Bedding Chopper.

It's available with a 5 hp. gas engine, a 3 hp. electric motor, or in a cordless electric model with built in battery charger.

Length of cut can be adjusted from about 1 to 7 in., depending on the number of knives inserted. Individual bales can be chopped up at the rate of about 1½ minutes per bale. The machine provides sufficient "rev" to propel the chopped straw uniformly throughout each stall, from front to rear.

In addition to making straw, cornstalks, or weather damaged hay go twice as far when used for bedding, the fact that the material is chopped makes for easier manure spreading and handling. If the baled bedding is dry and dusty, pouring a quart of water on the cut side of the bale as it's inserted into the chopper will control the dust problem, says Brisebois.

Dealerships are being set up throughout the United States and Canada, and a major U.S. manufacturer of dairy equipment was negotiating an agreement to market the Chop 'n Bed as this issue of FARM SHOW went to press.

Suggested retail is \$1,250 for the 5 hp. gas engine driven model, \$1,295 for the 3 hp. electric motor model, and \$1,650 for the cordless electric model with charger.

For more details, contact: FARM SHOW Followup, Skil Way Enterprises Ltd., Marcel Brisebois, Marketing Director, 982 Cromwell Drive, Ottawa, Ont. K1V 6K6 (ph 613 733-6846).



Chop 'N Bed develops enough "rev" to uniformly distribute chopped bedding from front to rear of each stall.

## TRANSMITTER SIGNALS WHEN ANIMAL GOES INTO LABOR

# New Birth Detector Radios Delivery Time

A new birth detector, developed at the University of Arizona and soon to be offered for sale by an Illinois company, automatically signals via a radio transmitter when your cows, hogs, horses and other animals are about to give birth.

Designed originally for cattle, the matchbook size transmitter is taped or sewn to the birth canal of the pregnant animal. When the canal begins to dilate, just before birth, a small magnet separates from the transmitter, activating a switch that sends a signal to the receiver in your pickup, tractor or home. The signal is directional so you can easily find the one giving birth if more than one animal is outfitted with a transmitter.

"It'll work on any farm animal,"

says Dr. Walter Evans of the University of Arizona's electrical engineering department, who helped design the detector. "In fact, the transmitter was originally designed for the St. Louis Zoo to protect snow leopards, which kill their young 20 to 30 min. after birth."

The detector has been turned over to Vita Vet Laboratories, a Marion, Ind., company that plans to begin marketing the device this year. The company declined to give details on the device to FARM SHOW before it's ready to market.

"There's nothing unique in the parts, only in their application," Evans explains. "The transmitter broadcasts in a low medical frequency, lower than 50 megahertz. All

that is required is a receiver able to detect that weak a signal." The signal, although weak, can be detected up to 15 miles away with a good receiver that Evans estimates will cost \$200 to \$300. For less than \$70, you should be able to buy a receiver to pick up the signal within a 2 to 3 mile radius.

"You want to put your money in the receiver, not in the transmitter because the animal can't damage the receiver," he says. The transmitters can be reused and should sell for \$10 or less, again according to Evan's estimates.

"They're powered by one small hearing aid battery and will transmit for 4 hours once activated. If you don't get there in that time you're in

trouble," he points out.

The version built for cattle at the University is 3/4 in. square and 1/4 in. thick. The adjacent magnet is 1/8 in. sq. and 3/4 in. long. The magnet and unit have to be separate by 1-1/2 in. before the switch is activated. Smaller models will have to be developed for smaller animals.

For more information, contact: FARM SHOW Followup, Vita Vet Laboratories, Box 587, Marion, Ind. 46952 (ph 317 668-8988) or Drs. Warren Jewett and Walter Evans, University of Arizona, Electrical Engineering, Tucson, Ariz. 85721 (ph 602 626-2434).