## REQUIRES LESS DRAWBAR HP THAN A REGULAR CHISEL PLOW

## Experimental Rotary PTO-Powered Chisel

Latest concept in tillage machines is an experimental PTO-powered rotary chisel plow designed to use power from the tractor's PTO rather than drawbar pull to shatter the soil. The experimental chisel uses 6 curved chisels on a 4-ft. dia. powered wheel to penetrate and break up the soil, rather than single rigid chisels.

"The machine is strictly a research tool, but it is being used to test a machine concept," explains James Hendrick, who's developing the rotary chisel concept at the National Tillage Machinery Laboratory at Auburn, Ala.

Says Hendrick: "The concept of a powered rotary chisel is based on three factors: 1. Power can be transmitted to the chisels via a mechanical drive-line more efficiently than it can be transmitted via drawbar pull; 2. Reduced draft of tillage tools reduces the need for heavily weighted

wheels, thereby reducing soil compaction; and 3. Reduced draft will allow chiseling to be done in difficult traction conditions, increasing the timeliness of the chiseling operation."

The blades of Hendrick's field prototype turn in the same direction as the tractor wheels so resistance of the soil against the blades helps to push the machine across the field. Also, the back sides of the blades are designed so they do not press into unshattered soil, which helps reduce horsepower needs.

"The rotary chisel develops a significant forward thrust. Magnitude of the forward thrust is approximately half the drawbar force required to pull a rigid chisel under the same conditions," Hendrick told FARM SHOW.

"The rotary chisel breaks up the soil to a greater degree than a rigid



Prototype chisel plow requires less horsepower than a regular chisel plow because it turns in same direction as tractor wheels, developing forward thrust.

chisel. Also, cross-sectional area of the soil disturbed is about 30% greater for the rotary chisel because of its piercing and tearing action."

Hendrick says the next step is to build a two-row, field-size model with 5 ft. dia. blades to determine actual power requirements under field conditions. We'll keep you posted on further developments.

For more details, contact: FARM SHOW Followup, James G. Hendrick, National Tillage Machinery Laboratory, P.O. Box 792, Auburn, Alabama 36830

## **WELCOME BACK OLD FRIENDS**

## Now You Can Buy New "Old" Products

If you want the looks and reliability of old-time products without the hassle of worn-out originals, you'll be glad to hear that some manufacturers really do make things the "old fashioned" way.

Two Amish Colonies, one in Ontario and the other in Pennsylvania, manufacture and sell a whole range of products that went out of "style" years ago. They make everything from harness and horse drawn equipment to butter churns to cast iron farm dinner bells. Among their



most popular is a wood-fired kitchen range. "Our Pioneer Maid wood range offers a degree of finger-tip control undreamed of by our grandmothers. With a twist of the air intake controls, the fire leaps to life. Another twist and the fire instantly dampens down. The controls let you control exactly where the heat concentrates," says Elmer Stoll of the Pioneer Place in Aylmer, Ontario.

The air-tight Pioneer Maid features

overnight burn with its large 19 in. by 20 in. by 12 in. fire box and efficient air control. You'll probably only have to light it once a season, according to Stoll.

The modern looking stove also features a roomy 22 by 19 by 13 in. oven with a built-in thermostat and a 10-gal. hot water reservoir. The top is made of thick ¼-in. plate steel, and the side of welded ¼-in. steel. The stove weighs about 600 lbs. Maybe best of all, to wood stove veterans, is that all control knobs are made from walnut. No burnt fingers!

The Pioneer Maid cooking top stands 32 in. off the floor with a highback and shelf above that. It's 50 in. wide and 23 in. deep. Retail price is \$895.

For more information, and a copy of the Pioneer Place's catalog of old



time products, contact: FARM SHOW Followup, The Pioneer Place, Suppertime Stoves, Ltd., Rt. 4, Aylmer, Ontario N5H 2R3.

For information on the stove in the

U.S., contact: FARM SHOW Followup, Alvin Fisher Stoves, Rt. 1, Box 272, Salisbury, Penn. 15558.

The Lehman Hardware store in Kidron, Ohio, carries an inventory of more than 400 non-electric items



they call "the sensible way to meet today's needs".

Here's a list of some of the products offered in their "Non-Electric Catalog" (they'll send you a copy for \$2.00): Grist mills, gas or kerosene lamps, kerosene refrigerators or freezers, gasoline engine clothes washers, fruit presses, food dryers, farm bells, corn huskers, copper wash boilers, ice cream freezers, windmills, sausage stuffers, and noodle makers. They also carry wood stoyes, furnaces and accessories.

For more information, contact: Non-Electric Catalog, Lehman Hardware and Appliances, Inc., Box 41, Kidron, Ohio 44636 (ph 216 857-5441).

If you've got milk you want to process yourself, the Schleuter Company in Janesville, Wis., a dairy equipment company — handles the essential equipment; cream separators, pasteurizers and churns.

"We have two hand-operated separators and two electric models," says Robert Head, Schleuter representative. "The hand models turn out 90 and 148 quarts per hour while the electrics do 132 and 211 quarts. They range upward in price from \$400. Our pasteurizers sell for \$65 and \$77, and hold 5 and 8 quarts, respectively. Pasteurization takes about 30 min."

Schleuter's hand-crank butter churn is a glass-bottle type that holds 4 quarts.

For more information, contact: FARM SHOW Followup, The Schleuter Company, P.O. Box 548, Janesville, Wis. 53545 (ph 608 756-1266).



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