



Miller gangs his new drill in a group of three and pulls 1,000 gal. of fertilizer ahead of them.

**OFF-THE-SHELF COMPONENTS,
HEAVY-DUTY CONSTRUCTION**

New No-Till Drill Puts Fertilizer Under Seed

"Latest ag research says seedlings make better use of fertilizer placed directly beneath the seed," says Joe Miller, Heppner, Ore., manufacturer of a new no-till drill that has exclusive features requested both by researchers and farmers.

The drill's most unique feature is its furrow opener which measures 12 in. from front to back and contains both the fertilizer point and seed tube. The fertilizer point is up front, positioned about 2 in. lower than the rear of the opener. It opens the ground and fertilizer is piped to the bottom of the furrow directly behind the point. The seed tube is at the rear of the opener so that, by the time seed drops into the furrow, 2 in. of soil have filled in over the fertilizer.

There's no trash-cutting coulter ahead of the openers. Instead, Miller has developed a new straw removal wheel to eliminate trash build-up. The wheels, fitted with lengths of flexible cable "fingers", are chain-driven at a rate that's a little faster than ground speed. They flex when they hit anything solid, yet are stiff enough to drag residue past the opener.

The seed row is firmed on both sides by a pair of special steel packer wheels spaced 2 in. apart to help prevent crusting directly over the seed. Scrapers keep the wheels clean.

Miller's unique new furrow openers are spring-loaded, anchored to the frame of the drill by heavy-springs that reset automatically when they hit a rock. The resetting shock is cushioned by plastic pads.

"We've been testing it for 2½ years.

It makes use of all the latest research information as well as features farmers tell us they want," Miller told FARM SHOW. "Farmers want a drill they can fix themselves. Nearly all components are off-the-shelf or made from common tubing, angle iron, on steel. Farmers can fix anything on it themselves."

The drill comes in 10-ft. sections, with 10-in. spacing. Seed is stored in 25-bu. boxes metered by fluted cups chain-driven off the packer wheels. Seed drops from the metering cups to openers through flexible plastic hose. Seed depth is easily controlled by an adjustable screw on a hydraulic cylinder that lifts the openers. When the openers are lifted, a linkage automatically disengages the seeding system.

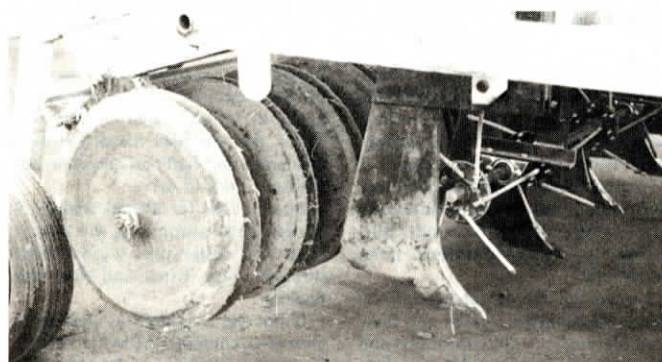
Liquid fertilizer can be pumped from a 1,000 gal. tank pulled ahead of the drill through plastic hoses to an aluminum manifold on each drill. It then flows through control orifices down to each opener.

"The drill is extremely maneuverable," adds Miller. "You can turn within a short 180° radius without lifting the openers. Optional transport wheels tow units between fields on all-pneumatic tires."

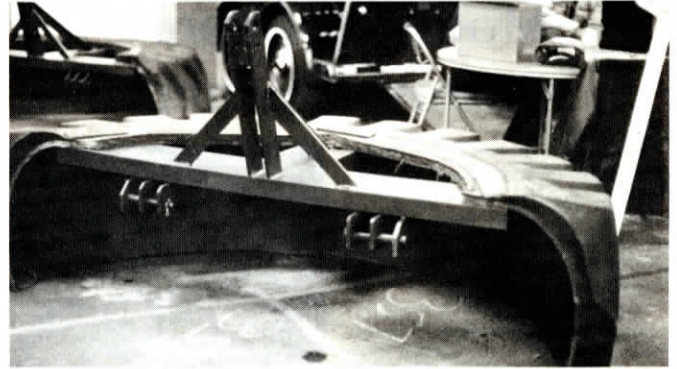
Miller says the drill plants at speeds of 3 to 4 mph pulled in gangs by a 7020 Deere or a D-5 Caterpillar.

The drill, minus the fertilizer tank and hitch, sells for \$13,500.

For more information, contact: Joe F. Miller, Miller & Sons Welding, Inc., 235 Linden Way, P.O. Box 650, Heppner, Ore. 97836 (ph 503 676-9613).



Up-front fertilizer point is 2 in. lower than seed tube at rear of opener. Note trash-clearing "finger" wheels alongside openers.



Scrapers, made from cross sections of industrial tires ranging in thickness up to 54 ply, "virtually never wear out".

"THEY NEVER WEAR OUT"

Barn Scrapers Made From Old Tires

"They cause less wear and tear on walls, floors and equipment," says Bob Merten, Parkdale, Ore., about his company's manure scrapers made from old tires.

The 3-pt. mounted scrapers range in width from 5 ft. to 10 ft. and are fitted with cross sections of industrial tires that range in thickness from 24 to 54 ply.

"They virtually last forever and don't smooth or make the concrete slick. When they hit walls or equip-

ment, they just bounce off and no damage is done," notes Merten.

The scrapers are built to fit either Cat I or Cat. II 3-pt. hitches. Merten has also built them to mount on front loaders or skid steer loaders.

The scrapers sell for \$495, fob factory.

For more information, contact: FARM SHOW Followup, Tillamook Concrete Grooving Co., 5665 Lava Bed Drive, Parkdale, Ore. 97041 (ph 503 352-6926 or 842-2687).

CUTS FASTER, EASIER, AND WON'T BOUNCE OUT OF CUT

You'll Like This New Twisted Firewood Wedge

A new twist in wood-splitting wedges is catching on fast with wood choppers in the Northwest. The new Lightning Twist Wedge uses the torquing power of a slight twist to split wood.

"Makes splitting even the hardest, knottiest wood much easier," says Doug Fraser, sales manager for the manufacturer, True Dimensions, Clackamas, Ore., noting that because it splits so much easier the twist wedge can be used with just a 3 or 4 lb. hammer on most woods.

The twist wedge is similar in size to a conventional wedge but it has a very narrow cutting edge. It enters the wood easily with no tendency to pop out of the split. As it drives deeper, a twist in the body of the wedge forces the wood apart. The downward impact is converted into outward torque that splits the log apart at a much faster rate.

The twist wedge sells for \$12.95, including postage.

For more information, contact: FARM SHOW Followup, Doug Fraser, True Dimensions, Inc., 10776 Hw. 212, Clackamas, Ore. 97015 (ph toll-free 800 223-8783).



The torquing power of a slight twist helps 7-in. tall wedge split wood.