TOP 5 IN. OF TOPSOIL LIFTED BY CONVEYOR CHAINS

No-Till Drill Lifts Stubble Over Seed

A British farmer-inventor thinks he may have found the best design yet for a one-pass planter, according to *Farmer's Weekly Magazine*.

John Gossop, who farms in East Yorkshire, England, tried numerous no-till planters before coming up with a totally new approach. He wanted to completely avoid having to plant into crop residue and didn't like any of the exising methods available for moving it out of the way.

So he designed a machine that looks somewhat like a potato harvester. It has a set of tillage shovels up front that dig down to a depth of about 5 in., lifting all soil and crop residue onto a chain conveyor that moves rapidly upward at a steep incline. On the way up, soil sifts down through the chain slats. At the top of the conveyor, all material left drops onto a horizontal moving sieve with larger openings that allow clods and rocks to fall through. Anything that doesn't fall through the screens, is thrown off the back of the sieve. By the time the last material reaches the ground, the crop has already been planted into clean soil by the rear-mounted grain drill.

Following the drill openers, a row of rubber tires pack the ground and also support the back end of the machine.

All drive components on the machine are mechanical, although Gossop plans to add hydraulic drives to his second prototype. That would allow the operator to adjust conveyor speed to ground speed. Ground speed and





Photos courtesy Farmers Weekly Gossop (above) says his one-pass drill eliminates problems with residue by lifting crop material, large clods, and rocks up above the planter.

conveyor speed must be synchronized for the planter to work properly, notes Gossop, who says he can plant about 3 acres per hour with the 6 ft., 6 in. wide planter behind an 80 hp. tractor. He plans to build a wider model later this year.

"There is very little moisture loss from the soil, and straw residues and soil are thoroughly mixed," says Gossop.

Contact: FARM SHOW Followup, John Gossop, Goole, East Yorkshire, England.

MAKES COMBINE UNLOADING FASTER, EASIER

Combine Spout

"Extender Kit"

High Capacity Wire Roller Mounts On Posthole Auger

"We can wind up three-quarters of a mile of wire in 15 to 20 minutes using our posthole auger," says Ernie Hottell about the high capacity wire roller he designed to eliminate the need to take the post hole auger off when winding and unwinding.

The Bayard, Neb., fencing contractor's wire winder features a 20-in. dia. spool, which is up to 10 in. larger than other commercial spools. It has a 2-in. dia. shaft that simply mounts in place of the auger bit on his Bush Hog post hole digger. There's a short piece of auger on the shaft below the spool that anchors the unit in the ground.

"You simply auger the pipe into the ground 6 to 12 in. to anchor it," Hottell explains. "While winding wire, you rock the tractor forward and backward to keep it winding evenly from top to bottom. When you're finished you raise the winder out of ground, loosen the set-screw it attaches with, and slide off the spool. The winder is cone-shaped so wire slides off easy.



Wire roller's 20-in. dia. spool has a 2-in. dia. shaft that mounts in place of auger bit on Bush Hog post hole digger.

"If you want to unroll wire, simply let the spool free-wheel."

Can be built to fit most post hole augers. Sells for \$225.

Contact: Hottell Fencing, R.R. 1 Box 286, Bayard, Neb. 69334 (ph 308 586-2133).



Four-finger sickle guards narrow the gap between guards which keeps the crop from falling forward onto the ground.

REDUCE CROP LOSSES

"Four-Finger" Sickle Guards

"Our new four-finger sickle guards are the strongest on the market and will last five times as long as conventional two-finger sickle guards. They reduce grain loss by narrowing the gap between guards which keeps the crop from falling forward onto the ground," says Andrew Davis, Mid-Continent Mfg., Inc., Colby, Kan.

Manufactured in Australia, the "Primary Guard" sickle guards are made from double heat-treated ductile iron. Nylon extension fingers can be snapped onto the guards, allowing you to adjust the width of the gap between guards according to crop conditions.

"They save grain by stacking it into a narrower gap which keeps it from falling forward onto the ground," says Davis. "They work much better than conventional two-finger sickle guards which have no way to keep the crop from falling forward onto the ground. Yield losses can range up to 40 percent under poor conditions. These new guards are especially valuable in light crops which have a greater potential for loss at the cutterbar. Another crop-saving feature is that both the guards and extension fingers are recessed on top so they'll catch shattered grain.

"Both the guards and finger extensions are virtually unbreakable. The extension fingers will flex, but they always return to their original shape. The four-guard design puts only half as much wear on each sickle as conventional two-finger guards so the cutting edges remain sharp much longer. The guards are about three times as expensive as conventional ones, but they'll pay for themselves



By using a special tool, nylon extension fingers can be snapped onto guards, allowing you to adjust width of gap between them.

in increased grain recovery, reduced guard wear and breakage, and less sickle wear."

Guards and extension fingers for a 30-ft. header sell for \$2,195.

The company also offers the Australianmade "Vibra Mat", a 1-ft. wide, reinforced vinyl mat that attaches to the back of the sickle and moves with it, providing a "live" surface behind the sicklebar that helps the crop to feed evenly into the auger without bunching up. The mat simply attaches to sickle bar hold-down bolts. "It moves back and forth so fast that there's no chance for the crop to bunch up between the cutterbar and auger," says Davis.

Vibra Mats are available in lengths of 20, 25, and 30 ft. A 25-ft. model sells for \$435 and a 36-ft. model for \$611. The mats can be cut to the size required.

Contact: FARM SHOW Followup, Mid-Continent Mfg., Inc., 510 E. Pine St., Colby, Kan. 67701 (ph 800 262-5267 or 913 462-7581; fax 7745).

Adding 1 1/2 to 4 1/2 ft. to the length of down spouts on combine unloading augers can pay off big by reducing grain loss, says Farmtec Industrial, Inc., Loreburn, Sask.

The manufacturer of a simple new boltin-place down spout extender kit says the design of each kit depends on make of combine, but each includes a bolt-on poly extender down spout.

"With headers getting bigger and unloading augers getting longer, it's getting trickier to unload. Our extender lowers the down spout and 'corrals' the grain at the same time so it drops straight down. Makes it easy to control direction of the grain so you can do a better job filling the truck. It also keeps light crops like milo and sunflowers from being blown away by the wind," says U.S. distributor Scott Waldie of Westward Products, Jamestown, N. Dak.

The extender kit uses existing bolt holes. You just remove the original spout, drill holes in the extender spout to match, and bolt it in place. As many as three 1 1/2-ft. sections can be bolted on. Chains allow the add-on sections to pivot for directional control.

Kits for top swing augers on Deere, Case-IH, and Massey-Ferguson combines sell for \$169.99 plus S&H. Models for bottom swing



Kit adds 1 1/2 to 4 1/2 ft. to length of down spout on combine unloading auger. augers and combines with hinge style chutes

sell for \$150.55 to \$188.19 plus S&H. Contact: FARM SHOW Followup, Westward Products, Inc., Jamestown, N. Dak. (ph 701 251-2182; fax 800 682-2359); in Canada, contact Farmtec Industrial Inc., Box 159, Loreburn, Sask., S0H 2SO Canada (ph 306

644-2088).