



As tractor moves forward, off-center floating ring turns with the wheel to clean out mud (or snow).

"IMPROVES TRACTION 30%"

Floating Ring Keeps Tractor Duals Mud-Free

"They're mechanically impossible to plug," reports Frank Greff, Berlin, Wis., about the floating ring mud removers he designed to keep dual-wheeled tractors rolling in muddy conditions.

The rings, which are about the same diameter as the duals, keep mud from building up between the duals so you get better traction during muddy spring and fall fieldwork.

"Besides preventing material build-up between the duals, the rings push off material between the lugs providing better traction and fuel efficiency. They improve traction by 30% and make duals work like they were made to work," Greff told FARM SHOW.

He feels that equipping tractors with floating rings will save farmers the cost of buying a tractor with MFWD just for the extra traction.

In his own test, his dual-wheeled tractor equipped with rings and pulling a plow into a low, wet spot out-pulled a similar hp. tractor equipped with MFWD. He's discovered that the mud-cleaning rings also work great in snow.

As you drive forward, each ring turns with the wheel hub and on a pulley. Any mud (or snow) that tries to build up is pushed out the top by the turning ring.

The rings also work when the trac-

tor moves in reverse. They don't require any energy from the tractor as can be left on in good conditions, a for highway travel, Greff points out.

A 10-in. dia. pulley mounted behind the duals keeps each 60-lb. ring off the ground, and from riding on the tires. The pulley, mounted on an adjustable bracket bolted to the tractor axle frame, has a hard rubber core to reduce noise and prevent sparks caused by metal to metal contact. The ring does nudge the side of the tire but doesn't gouge or damage the tire, notes Greff.

Each ring is made of 14-ga., 2½-in. dia. rolled steel tubing and comes in two sections that bolt together so you can install the ring without removing the tractor tires.

Greff notes that rings could also be put on triple-dual tractors, combines, and even discs to prevent plugging. He points out that the rings don't interfere with other equipment. If you do turn too short and hit the ring, it'll simply push forward, he notes.

Greff hopes to have the traction rings into production to fit most wheel sizes by fall. He plans on selling them for \$400 a pair.

For more information, contact: FARM SHOW Followup, Frank Greff Sr., Rt. 1, Berlin, Wis. 54923 (ph 414 361-4274).

Adjustable bracket supporting top pulley is bolted to tractor's axle. Pulley keeps the 60-lb. ring off the ground and from riding on the tires.



Willard Pearson hopes to have his Chain Sickle available for this year's soybean harvest.

SICKLE SECTIONS ON CHAIN-TYPE LINKAGE

Chain Sickle – New Way To Cut Hay, Soybeans

"In soybeans, it'll save one to three bu. an acre and enable you to go faster so you can cover more acres in a day," reports Minnesota farmer Willard Pearson, of Dawson, designer of the "Chain Sickle," a first-of-its-kind sickle section on a chain system for cutting hay, soybeans and small grains.

"A sickle bar's forth and back action has a stop at each end of the stroke. This causes vibration and metal fatigue. By reducing this action, you have less wear and less bean loss," says Pearson.

He cites "faster ground speed" as the chain sickle's primary advantage when cutting hay and small grains.

Pearson has installed his working prototype chain sickle on a 7-ft. hay mower. He plans on adapting it to fit combines, swathers and mower-conditioners of all sizes — even flex heads.

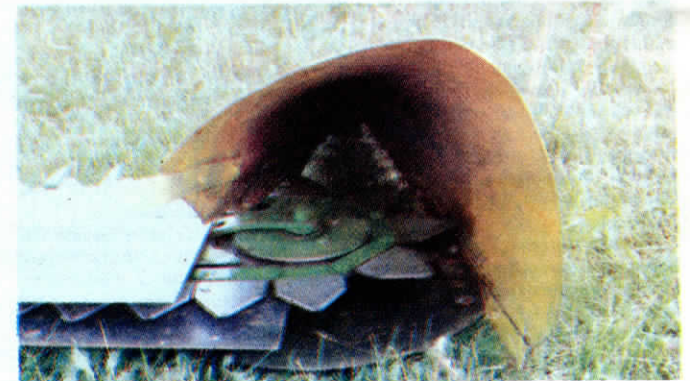
Operating much like a chainsaw, the sickle chain uses conventional sickle sections on a specially-

designed linkage system that turns around two sprockets, one of which is adjustable for setting chain tension. A hydraulic orbital motor allows the operator to vary sickle chain speed, and also to reverse the chain's direction.

Another advantage of the chain, says Pearson, is that all the sections wear evenly — not just the few in the soybean row. And, by reversing the hydraulic flow and the direction the chain turns, you can cut with the other side of the sections. He notes that even a missing section doesn't create problems — sickle speed compensates for it.

Pearson has also equipped the system with a slip clutch in case he hits a tree branch or other obstacle. He's hoping to have his new Chain Sickle available for fall harvest.

For more information, contact: FARM SHOW Followup, Willard Pearson, Rt. 1, Box 98, Dawson, Minn. 56232 (ph 612 769-4515).



The continuing "chain" of sickle sections can be run clockwise or counter-clockwise. All sections wear evenly.