Design of the opener and firming roller assures that all seed is placed at precisely the same depth, says inventor LeRoy Richard.

Ribbon Seeder Maximizes Use Of Soil And Fertilizer

LeRoy Richard, Horace, North Dakota, felt conventional methods of drilling small grains didn't allow the crop to make the best use of soil nutrients and also broadcast fertilizer over too wide an area.

He decided if he could concentrate seed and fertilizer in one area, he could use fewer inputs with better results.

Over the past six years he's developed a toolbar that can both fertilize and seed. He went to the field with his first prototype four years ago and has continued to refine it. His current model can be changed from drilling a single row to a paired row planter, ribbon seeding, fall zone tiller, etc., with a single wrench and less than 10 minutes time per row.

For crops normally drilled, like wheat, his system seeds in 10-in. ribbons, with skips of open ground between them. In the same pass, he applies urea below the seed and other nutrients in closer proximity. His patented opener covers the fertilizer before dropping the seed above it. The design of the opener and firming roller assure that all seed is placed at precisely the same depth, whether it's seeded the width of the tilled ribbon or in a 7 1/2-in. spaced single row down the center.

Another feature Richard incorporated in his opener is the design of the seed tube which allows seed to drop into the soil at zero velocity. "There's no rolling or bouncing with this design," he says. "Seed stays in the soil exactly where it drops from the tube."

Seed tube design allows seed to drop into furrow at zero velocity. "There's no rolling or bouncing with this design," says inventor LeRoy Richard.

Richard sees his ribbon seeding and multiple use toolbar design being used in soybeans where growers want the advantages of solid seeded beans without the potential disease problems.

He's formed Strategic Ag Systems, Inc. to manufacture and market the Universal Agricultural Implement Toolbar system and hopes to have it on the market in the near future. Price should be about $1,250 per row.

Contact: FARM SHOW Followup, LeRoy Richard, Strategic Ag Systems, Inc., 7604 Brink Drive, Horace, N. Dak. 58047 (ph 701 281-9499).

"Full circle" scraper can rotate 360 degrees in either direction. "Because it turns all the way around it can be used for pulling material as well as pushing," says inventor Owen Vaaler.

"Full Circle" Skid-Steer Scraper

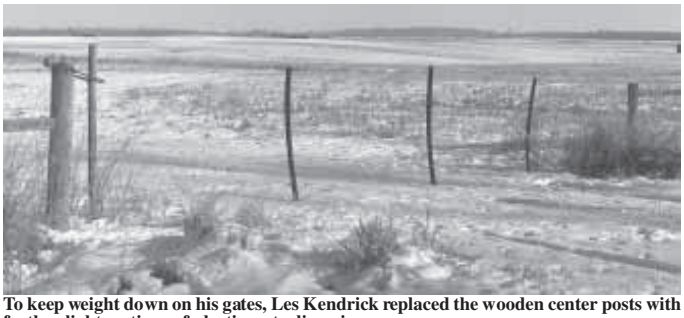
Owen Vaaler of Spring Grove, Minn., has designed a "full circle" scraper for skidsteers that can rotate a full 360 degrees in either direction. "Because it turns all the way around it can be used for pulling material as well as pushing," he says. "My son has a snow removal business and it is much easier to pull the snow away from a garage door, rather than shoveling it."

The scraper is made of rolled 5/16-in. steel and can attach to any skid steer. "The adapter for the blade is pretty much universal. I haven't seen a skid steer that it wouldn't fit on," says Vaaler. The blade is able to rotate 360 degrees thanks to an orbital mower that attaches to the auxiliary power hook up. "You can turn the blade and push snow or gravel or mud sideways," says Vaaler. "You can do many more things than you can with a regular pickup add-on plow."

The add-on scraper can also be used as a grader. "I also sell attachments that will turn the blade into a box grader. The blade has a built in floating mechanism that will keep the blade level no matter what," says Vaaler. "There is also a soft-blade you can use for moving mud or manure."

Vaaler Co. Manufacturing sells the blade for $2,000.

Contact: FARM SHOW Followup, Vaaler Company, P.O. Box 81, Spring Grove, Minn. 55947 (ph 507 498-5577).



To keep weight down on his gates, Les Kendrick replaced the wooden center posts with feather-light sections of plastic waterline pipe.

Lightweight Gate Easy To Handle

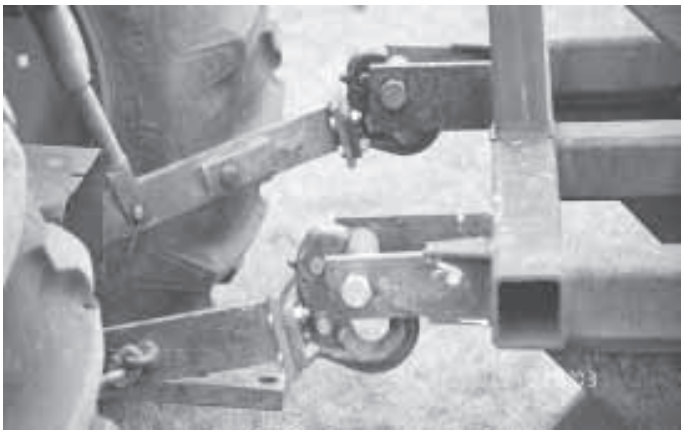
Heavy gates are a pet peeve for Les Kendrick, so the Pickardville, Alberta, farmer decided to revamp his pasture gates by replacing the wooden center posts with feather-light sections of plastic waterline pipe.

He drilled small holes through the pipe wherever he wanted to attach a strand of barbed wire, and then ran a short piece of smooth wire through the holes to securely tie it around the barbed wire. The plastic "posts" keep the gate from tangling.

Kendrick likes this system because it makes the gate so easy to open and close, and he says wooden posts are not necessary for gate strength.

"With this gate, you could get in and out of your field while wearing your Sunday best," he says.

Contact: FARM SHOW Followup, Les Kendrick, Gen. Del., Pickardville, Alberta, Canada T0G 1W0 (ph 780 349-3538; email: lekendrick@west-teq.net).



"Bending or losing pins is now a thing of the past for me," says Carson, who modified the 3-pt. hitch on his tractor and put mounting brackets on all his 3-pt. implements.

Home-Built 3-Pt. Quick Hitch

"It works faster and is also much safer to use than conventional 3-pt. hookup systems," says John Carson, Sherwood Park, Alberta, who modified the 3-pt. hitch on his Kubota tractor as well as the mounting brackets on all his 3-pt. implements.

"I can easily and safely attach or remove any 3-pt. implement in just a few seconds," says Carson. "Bending or losing pins is now a thing of the past for me."

He cut 3 to 4 in. off each end of the lower hitch arms, then welded 4 by 4-in. steel mounting plates in their place. A pair of pintle hitches - the kind used by large trucks - were then bolted onto the plates.

The next step was to modify the mounting brackets on each of his implements. He left the original bracket in place and welded on another identical bracket 6 in. away. Then he made a 6-in. long sleeve that fits between the two brackets. A 1 by 8-in. bolt fits through the brackets. He made the sleeves by drilling a 1-in. dia. hole through a 2-in. dia. solid metal rod, leaving walls that are 1/2 in. thick.

To hook up to the implement, he simply backs up until both pintle hitches are under the sleeves, then raises the lower lift arms slightly. Then he manually closes the latches on the pintle hitches and attaches the top link.

"I made this modification to every 3-pt. implement on our farm three years ago and wouldn't want to farm any other way. I don't know why someone didn't think of it long ago," says Carson. "I use it with my 50 and 100 hp Kubota tractors and with my disk, subsoil ripper, snowblower, rototiller, sweeper, and bale forks, mower, etc.

Close-up of bracket on implement.

"I looked all over trying to find a commercial 3-pt. hitch system like this but had no luck. Some of the bigger 4-WD tractors on the market today come factory-equipped with a quick tach 3-pt. It's quite a job to back the tractor in and try to align the implement with the lower lift arms, because you have to get everything lined up just perfect. Sometimes it used to take me 5 to 10 minutes to hook up an implement.

"Another problem is that the pins can loosen up and get bent so bad they have to be replaced. I've never had to repair or replace anything."

Carson has drawn up detailed diagrams of how he made the quick hitch. Anyone interested can fax or email him.

Contact: FARM SHOW Followup, John Carson, 52277 RR 225, Sherwood Park, Alberta, Canada T8C 1C7 (fax 780 467-5257; email: jcarson@interbaun.com).