## **Roller Rig Levels Rough Pastures**

Livestock producers faced with rough and rocky pastures now have a new tool for leveling them out. Ag Shield, a Canadian equipment company, has devised a heavy duty blade system that mounts in front of an Ag Shield land roller. As the "Pasture Doctor" rig is pulled across a lumpy or rocky pasture or hayfield, the blade levels the soil mounds and the heavy duty roller pushes rocks into the soil. The rig can also be fitted with a small air seeder so pastures can be interseeded to improve stands.

Producer Morley Sparrow says that before he used the Ag Shield setup he rented a field leveler and followed that with a roller, requiring two passes across the field.

Ag Shield says the blade rides on gauge wheels spaced 18 in. apart. The hydraulically adjustable gauge wheels move blade height from 3/4 in above the soil surface which leaves alfalfa crowns intact on a hay field, to 2 1/2 in. for working in soft and fluffy conditions. In heavily grassed CRP fields, a controlled burn to remove the vegetation simplifies the smoothing operation.

The Pasture Doctor can be optioned with an air delivery system to place seeds behind the leveling blade so they're packed into the fresh soil surface for better germination. The company says older pastures benefit from adding grass to fill in bare areas rather than completely tilling and reseeding the whole pasture. The Pasture Doctor also works well for seeding cover crops. Optional clamp on bars that cover the 42-in dia. rollers will beat down the cover crop before seeding.

Single section rollers are available in widths from 11 to 20 ft. Transport pivots reduce the road travel width of single section rollers to 8 1/2 ft. Threeplex units are available in sizes from 30 to 52 ft. Each size folds to a 12 1/2-ft. transport width. Wings lock in place with heavy duty bars that run from the center section to the outside of each wing.

Using the Pasture Doctor on a hay field provides other benefits. Small rocks are pushed into the soil and gopher mounds or other uneven surfaces are leveled, creating a smooth surface. Harvest equipment can be run closer to the ground without the fear of plugging sickles with dirt or picking up dirt and rocks and running it through a chopper or baler. Smooth fields allow an operator to run quicker with less stress on the equipment and the driver.



Heavy-duty blade system mounts in front of Ag Shield land roller to level lumpy pas-tures or hay fields. Rig can also be fitted with an air seeder for interseeding pastures.

Ground pressure on the Pasture Doctor 42in. rollers is about 4 lbs. per sq. in. Watertight drums can add another 500 lbs. of weight per foot of roller.

The 42-in. dia. rollers on the Pasture Doctor are 9/16 in. thick. A roller section has a high tensile 2 1/2-in. replaceable roller

shaft. The rugged box frame has gussetted corners for improved strength.

Contact: FARM SHOW Followup, Ag Shield, Inc., Box 9, Benito, Manitoba, Canada R0L 0C0 (ph 888 562-0924; www. agshield.com).

### Gate Hinge Held Tight With Muffler Clamps

Russell Hackman has been featured previously in FARM SHOW for clever fencing ideas developed over 40 years of farming and ranching. He sent us a package recently of his newest invention that's bound to catch the eye of anyone who has ever had gates break loose from a metal post hinge.

"The clamp-on hinges sold in most farm stores work fine on a small yard gate, but they aren't much good when it comes to holding a large pipe gate on a metal post," says Hackman. "I've had them break off, fall off, bend or just plain rust up. Every one of those problems is a nuisance. Now I make my own brackets and they can hold a gate that weighs a couple hundred pounds."

Hackman makes his metal hinge supports from flat stock that's 1/4 in. thick and 1 1/2 in. wide. To make 2 hinge brackets he cuts 6 pieces of the flat stock 2 1/2 in. long. Three pieces are used for each bracket: one for the horizontal surface, one for the vertical surface and the other for a diagonal support. He welds the pieces together in the shape of a triangle, then welds a 1/2-in. by 2-in. metal shaft upright on the flat surface. The shaft supports one of the gate eyeloops and holds it in place with a cotter pin inserted on top of the shaft.

Hackman uses 2 heavy duty 2 1/2-in. muffler brackets to attach each hinge bracket to a 2 1/2-in. metal post. He welds one of the U-bolts onto the 90 degree angle under the top of the hinge and another one below the 45 degree angle support on the bottom. "These hinge brackets are a lot stronger than the ones you can buy in a store," says Hackman. "I've never had one break, even on a gate that's 16 ft. long."

Hackman says for metal posts larger than 2 1/2 in. he uses larger muffler clamps and that makes an even stronger hinge. The hinge bracket can also be adapted for wooden posts using a pair of U-bolts and a metal strap to secure the hinge. Another alternative would be to make the vertical support on the bracket about 6 in. long, then drill 2 holes for 3/8-in. bolts that thread through the post and are held on the opposite side with nuts and lock washers.

Contact: FARM SHOW Followup, Russell Hackman, P.O. Box 1084, 2523 FM 884, Yorktown, Texas 78164 (ph 361 564-8855).



Clamp-on gate hinge attaches with 2 muffler clamps to a 2 1/2-in. dia. metal post.



"Works great to grind small amounts of feed," says Marcus Yoder, who converted an old burr mill to pto power, using a rubber tire to friction-drive the belt pulley.

## "Repowered" Antique Feed Grinder

"I gave an old Letz burr mill a new lease on life by converting it to pto power, using a rubber tire to friction-drive the belt pulley," says Marcus Yoder.

To make the conversion, he used parts from a Ford Explorer, Buick Park Avenue, an international field cultivator, a silage wagon and wheels from a White lawn tractor. A pto shaft direct-drives the tire.

"It works very well to grind small amounts of feed. The original mill wasn't modified so with the removal of a few bolts, it could again be used with a drive belt," notes Yoder. Contact: FARM SHOW Followup, Marcus Yoder, 53248 365th St., Grove City, Minn.

# 56243 (ph 320 220-0454).

### **Guards Push Corn Away From Center Pivot Wheels**

Duane Rolfson harvests an extra bushel of corn for every tower on his center pivot irrigation rig. On a 160-acre pivot, that can add up. His Row Guards simply push the stalks aside from the gearbox and frame on each set of towers.

"I wasn't happy watching stalks break off as the gearbox passed," says Rolfson. "I did some measuring and bent some 3/4-in. rod to the angle I needed and made mounting brackets for them."

The simple device worked so well that his dealer, Dan Bauer, Kimmes-Bauer, suggested Rolfson patent it. "He liked the idea of what I made," notes Rolfson, "He also saw that the guards made a convenient step for climbing the tower.'

Rolfson now sells the patent-pending device to Reinke and T-L Irrigation pivot owners. He is developing a design for Valley Irrigation center pivot towers.

"It makes no difference if the pivot is going left or right," says Rolfson. It works the same. I figure I'm saving an average of 2 stalks per tower per row."

Rolfson noted that the Reinke and T-L gearboxes extend out about 12 in. from the



Row Guards works no matter which direction pivot is traveling.

wheels. Valley gearboxes are about 16 in. wide and will require a different design, but will save about 3 stalks per tower per row.

The custom fabricated and powder coated guards are priced at \$60 per pair with bolts for mounting. They can be ordered directly from Rolfson. He estimates the Valley units when introduced will be priced at around \$70 per pair.

Contact: FARM SHOW Followup, Row Guard LLC, 53733 262 St., Austin, Minn, 55912 (ph 651 895-3512).