Two metal bars bolt to top lip of grain door and are hinged in the center. They're pulled upward by a roller chain on a sprocket when door's opener wheel is turned.

MAKES IT EASY FOR ANYONE TO OPEN SLIDING GATE

"E-Z Lift" Door Opener For Gravity Grain Wagons

"My wife always had trouble opening end gates on gravity wagons when she hauled corn. It took too much energy to get them up because of the pressure of corn against the side of the wagon," says Sanborn, Iowa, farmer Sid Jiskoot. "Even the guys at the elevator have problems sometimes."

So two years ago Jiskoot solved the problem by designing a fulcrum-like device that provides a little extra "oomph" when the gate is first lifted. Jiskoot's patent-pending invention works so well it has become a standard feature on all Demco gravity wagons. Plus, the company offers kits for retrofitting its wagons with the device.

"He brought it over and showed us and we bought the rights," says Tom Sheffield of Dethmers Mfg. Co., Boyden, Iowa, maker of Demco wagons. "It really works."

Called the E-Z Lift Door Opener, Jiskoot's invention basically consists of two metal bars bolted to the top lip of the grain door. The bars are hinged in the center so they can be pulled upward by a roller chain on a sprocket when the door's opener wheel is first turned. The upward motion in the center of the bars pushes the ends down against two metal "stops," thus applying extra pressure to help open the door.

"It uses a crowbar effect that opens the gate 1 1/2 in. on the first turn of the wheel," Jiskoot explains. After that, the gate simply works normally. The opener automatically resets itself when the gate is closed.

Kits for retrofitting Demco wagons with the E-Z Lift Openers are available from Demco dealers for $61. Call 1 800 543 3626, U.S. and Canada, for the dealer nearest you.

Meantime, Jiskoot's deal with Dethmers Mfg. permits him to retrofit other wagons with E-Z Lift Openers. He's modified about 30 wagons over the past two years. For most makes, that costs $70, he says.

Contact: FARM SHOW Followup, Sid Jiskoot, 5858 360th St., Sanborn, Iowa 51248 (ph 712 757 4609).

"VIRTUALLY ELIMINATES CULTIVATOR BLIGHT"

Low-Cost Guidance System

"It virtually eliminates cultivator blight and reduces stress on the driver. I built it for less than $500," says Jim Howell, Wilder, Idaho, about the passive guidance system he and his father built.

"We built and patented it 8 years ago and have used it ever since with excellent results," says Howell. "It compares favorably with commercial guidance systems that sell for $4,000 to $6,000."

The system bolts onto a 2 1/2-in. sq. steel bar that bolts to the back end of the tractor between the lower arms of the 3-pt. hitch. It's made up of two 1-in. sq. steel arms with a steel "sensor rod" on back and a pair of microswitches in front, one on each side. The arms mount on bushings that allow them to move up or down independently of the tractor, and they pivot back and forth on bearings. A chain keeps the arms from dropping all the way onto the ground.

The sensor rod rides inside the marker furrow left by Howell's previous pass. As the sensor moves from side to side, it trips the microswitches on either side, which causes the two lights inside the cab to go on and off, telling Howell which way to steer.

"It's sturdy, simple, and inexpensive. There are no hydraulic controls to plumb into the tractor's steering system or any side-shifting fast hitch to worry about. It's also extremely accurate. We can adjust it by simply turning a threaded bolt that trips the microswitches. We usually set it to light up whenever the cultivator drifts 1 1/2 in. off center of the marker furrow. When the lights are off, we know we're dead on the row. The marker furrow needs to be only 2 to 3 inches deep. We've built a few for neighbors and are willing to build more."

Howell and his father use the guidance system on a 12-row bedding bar for making vegetable growing beds, but say it'll work on other equipment.

Contact: FARM SHOW Followup, Howell Farms, 22583 Hwy. 95 N., Wilder, Idaho 83676 (ph 208 482-7381).

Rotating "beater bar" mounted on top of bucket strips silage from bunker without taking it off in big chunks, leaving sealed wall of silage that hardly spoils at all.

ROTATING SPIKES "STRIP" SILAGE FROM BUNKER SILO

Bucket Fitted With Add-On "Beater Bar"

A hydraulic-powered, rotating "beater bar" mounted on top of his front-end loader bucket lets Francis Meissen, Barron, Wis., quickly load out silage from his bunker silo.

"It strips silage from the bunker without taking it off in big chunks, leaving a nice sealed wall of silage that hardly spoils at all," says Meissen, who mounted the "beater bar" on his Deere 4030 tractor equipped with a Deere 148 loader and 6-ft. bucket.

The beater bar consists of a 4-in. dia., 1/4-in. thick length of steel tubing fitted with 2 1/2-in. long steel spikes cut out from 3/8-in. thick flat steel. A pair of 1 3/4-in. dia. stub shafts mounted on roller bearings at each end of the bar are chain-driven by a 25 gpm hydraulic motor. The beater bar is supported by brackets made out of 1/2-in. thick, 4 1/2-in. wide steel bars that bolt to the bucket. To load silage, Meissen raises the bucket to the top of the bunker, starts the beater bar, then tips the bucket downward and starts stripping off silage so it falls to the bottom of the bunker. He then scoops up the pile of loose silage.

"It virtually eliminates feed spoilage and also saves wear and tear on my bucket and loader," says Meissen, who's built two beater bars for neighbors in addition to his own. "The 25 gpm hydraulic motor turns at only 200 rpm's so it has a lot of torque and won't stall out. It keeps turning no matter how hard I push on the loader. The beater bar strips silage from 1 to 6 in. deep. One pass makes about two buckets of loose silage. I mounted cutter discs equipped with spikes at each end of the beater bar in order to make a clean cut. I rotate the beater bar in a forward direction to strip silage, but I can also rotate it backward.

Meissen built this beater bar for a neighbor's Case-IH 1840 skid steer loader.

"The spikes are tipped ahead and welded on in a spiral fashion. The only silage that's disturbed is what's removed. Silage behind the spikes doesn't get loosened up which keeps oxygen from getting in and causing it to spoil. I think it might also work for unloading bagged silage.

"It chews right through corn silage, but where it really works nice is on haylage. Most farmers don't store haylage in bunker silos because it gets packed and stringy. Digging it out is difficult."

Contact: FARM SHOW Followup, Francis Meissen, 1173 10 1/2 St., Barron, Wis. 54812 (ph 715 537-3629).

Steel "sensor rod" bolts onto back end of tractor between lower arms of 3-pt. hitch.