#### **Two-Wheeled Bin Crane**

"We use it to put up new grain bins or to increase the capacity of existing bins by adding additional rings," says Wayne Husak, of Neepawa, Manitoba, who along with his father Peter, made a two-wheeled "bin crane" with a boom that reaches 27 ft. high and can handle bins up to 20 ft. in diameter.

The "bin crane" lifts the roof by lowering a cable through the top hatch and attaching it to a steel ring. As the roof is raised, bin sections are added on later.

A heavy-duty winch off an old Army 6-WD truck mounts on the hitch. The winch is powered by an orbit motor that operates off tractor hydraulies. The hitch is built with a telescoping pipe. Another telescoping pipe runs from the top of the boom down to the front of the hitch. By removing pins from the telescoping pipes, the boom can be lowered down for transport.

Contact: FARM SHOW Followup, Wayne Husak, Box 1228, Neepawa, Manitoba, Canada ROJ 1H0 (ph 204 476-3868).



## Manure Spreader Converted To Hydraulic Drive

A hydraulic motor mounted on a 10-ton manure spreader lets John Conway spread manure without worrying about breaking the unloading apron.

The hydraulic motor mounts directly on the gearbox that was used to be ptodriven. The motor is powered by the tractor's remote outlets and is bolted to a steel plate that's welded over an access hole in the shield covering the gearbox. He had a shop make up a small driveshaft that slips over the gearbox's input shaft. The motor mounts on the other end. The spreader's beater is still chain-driven off the pto shaft, and the gate still raises or lowers hydraulically.

"Operating the apron hydraulically lets us start to unload the spreader gradually without putting the unloading chains under immediate stress," says Conway, who feeds beef cattle. "We haul our own manure and also a lot of turkey manure from a neighbor's farm. Turkey growers use sawdust for bedding so the manure can be hard to spread. It takes a lot of torque to get a big load started. There was no way to ease into unloading with the pto so the unloading chain often broke and we had to shovel out the manure. We ran our hydraulically-operated spreader all last fall and this spring without a single breakdown."

Conway also added heavier chain links, doubled the number of bars on the apron to reduce the torque on each bar, and installed a sheet of slick plastic over the wooden floor to reduce drag.

He paid \$600 for the motor and spent a total of about \$2,000 to modify the spreader.

Contact: FARM SHOW Followup, John Conway, 12811 155th St., Wellman, Iowa 52356 (ph 515 636-3777).

#### Field Cultivator Shanks Replaced With Heavy-Duty Coil Shanks

After he got tired of replacing broken compression springs on the shanks of his 12-ft. field cultivator, Robert Haws, Grassie, Ontario, decided to replace the shanks with heavy-duty 1-in. sq. steel coil shanks, then bolted new field cultivator points onto them.

The cultivator now works better than new," says Haws. "The original springs were always breaking on rocks, but I haven't broken even one of these coil shanks. They either jump over rocks or jerk them out. The shanks were designed to be mounted on a bar angled upward so I had to cut out the mounting brackets to fit my cultivator's flat bars. My cultivator has four rows of shanks. I got the coil shanks from my brother-in-law. No one seems to know what type of implement they were designed for, but Deere stopped making them years ago. I got them from my brother-in-law for nothing. I spent about \$400 for new Deere points and for



labor to modify the mounting brackets.

"I pull a field cultivator equipped with S-tine shanks behind this cultivator to smooth out the ground. I had to rebuild the hitch on back of cultivator and lower it 8 in. in order to keep the back row of shanks from digging too deep. I also pull a packer-roller and a chain harrow behind the two cultivators. I use a Deere 3155 4-WD tractor to pull all of the implements."

Contact: FARM SHOW Followup, Robert Haws, Rt. 1, Grassie, Ontario, Canada LOR 1M0 (ph 905 945-4668).

# Adjustable Deflector For **Deere Mower-Conditioner**

"When I first bought my Deere 1320 disk mower-conditioner, it would only put hay in windrows. We lost a lot of good hay to rain because it took too long to dry. Now that we can spread hay out in a wider pattern, we've cut losses to a minimum," says Alvin Mast, Jr., Ava, Ill.

Mast fitted the Deere mower with an adjustable deflector that's positioned just behind the conditioner. He also cut off about 6 in. at the bottom of the factorybuilt windrowing shields on back of the machine. The deflector directs hay downward as it comes off the conditioner and out under the windrowing shields, laying down a windrow that's the full width of the mower. To lay hay down in a normal size windrow, he turns the deflector all the way up so hay comes off the conditioner normally and is windrowed by the factory shields.

The deflector is made out of 12-in. wide sheet metal, 1/8-in. thick, that's slightly curved downward. The upper edge of the deflector welds to a 1-in. dia. pipe. Two short pieces of pipe (1 1/2 in. long), which fit snug over the 1-in. deflector pipe, mount on either side of the mower. The deflector pipe pivots inside these short pieces of pipe. A handle welds to one end and is used to position the deflector in four different positions using adjustment holes on a pie-shaped plate mounted next to the handle.

"In light hay, I set it to put hay in a normal-size windrow. In heavy hay, I use the full spread position. Under average conditions, I use the second hole from the top which gives me about 80%t of the maximum spread width," says Mast, who rakes the wide windrows before baling.

Contact: FARM SHOW Followup, Alvin Mast, Jr., Rt. 2, Box 113, Ava, Ill. 62907 (ph 618 426-3711).



Photo shows pivoting deflector in "down" position.



Mast cut 6 in. off bottom of original windrow shields on either side of conditioner in order to get a full spread of hay.



This lever pivots deflector up and down and holds it in place.



### Gooseneck Gravity Wagon Dumps Out Bottom Or Side

This 400-bu. gooseneck grain cart has a hydraulic-controlled dump gate on bottom for dumping into pits and also a sideunload hydraulic-driven auger for loading out into augers.

A hydraulic pump that mounts above the back bumper is driven by a pto on a pickup. A 6-gal. fluid reservoir mounts on the cart's frame. An auger runs lengthwise at the bottom of the cart and unloads into the 10-in. dia. side-unload auger. A pair of hydraulic control valves mounted on the side of the frame operates the augers and dump gate. "It hauls almost as much as a grain truck but cost only about \$5,500 to build," says Arthur Michels, Effingham, III. "I built it because my fields are up to 12 miles away. I go about 40 mph on the highway and use a 3/4-ton 4-WD pickup to pull it."

A 9-ft. long pto shaft connects to the pickup's transfer case. Michels also uses the pto-driven pump to operate a pickupmounted sprayer.

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