

## Hay Wagon Doubles As Bin Mover

A Canadian farmer has discovered that his small square bale wagon works great for transporting grain bins from farm to farm or down the road.

Jim Moores, Manitou, Manitoba, uses an unmodified Anderson hay wagon, built by a local manufacturer, that's designed to hydraulically place stacks of 99 small square bales in the field and also retrieve them. The wagon is equipped with seven 7-ft. long spring-steel tines at the rear that slip under the bottom of the bin and a hydraulic tip-up floor. To load a bin the front wheels and front panel on the wagon are removed. The sides of the wagon hydraulically expand wide enough to cradle the bin. A rope is tied around the top of the bin. Once loaded, Moores tips

the bin down for transport.

"I've used it mainly to move bins across my farm yard and occasionally to move bins short distances for neighbors," says Moores. "I can't move bins that are more than 14 ft. in diameter. The bins I've moved hold 1,350 and 1,650 bu. I can move slightly taller bins by keeping the wagon floor tipped at an angle. Sometimes I have to jack the bin up before I can slide the steel tines under the floor. If the bin doesn't have a floor I install cross braces inside to keep the sides from collapsing."

Contact: FARM SHOW Followup, Jim Moores, RR 2, Manitou, Manitoba Canada R0G 1G0 (ph 204 242-2820).



## Crank-Off Wagon Tarp

Water and wind don't steal any grain from Larry Otta, McCallsburg, Iowa, since he fitted his wagons with crank-off tarps.

Otta first cut canvas to fit the wagon, then anchored one side of the tarp to the wagon and attached a pipe to the other side. Then he mounted a universal joint on one end of the tarp pipe, to which he fitted a long handle and crank made out of 3/4-in. pipe. The handle, which remains permanently attached, slides into a couple of holders at the rear of the wagon. Lets him cover or uncover the wagon in seconds from the ground. An elastic strap stretched across the top of the wagon keeps the tarp roll in place as it rolls and unrolls.

Otta says he was able to buy the components - tarp, pipe, and universal joint - for about half the cost of a commercial crank-off cover.

Contact: FARM SHOW Followup, Larry Otta, Rural Route, McCallsburg, Iowa 50154 (ph 515 434-2622).



## Old Anhydrous Tank Provides Mobile Air Supply

A 1,000 gal. converted anhydrous tank makes a nifty mobile air supply for cleaning out combines, powering air tools, and doing other chores around the farm, according to Fairbury, Ill., farmer Roger Wessels.

He says the big tank provides a tremendous volume of air that's especially handy for cleaning out his two combines. He uses 50 to 60-ft. of hydraulic hose as an air hose for climbing all over the combines blowing out dust and chaff.

Wessel has found unusual uses for the big air tank. "We used it to power air tools when taking down grain bins that were located a long way from the farm. And once we pulled it behind a semi with a blown engine that we were towing to power the air brakes on the truck."

Wessels says the big tank was easy to convert to hold air and he doesn't think safety is a problem since he never puts over 175 psi in the tank and it was de-

signed to handle much more. He fills the tank with a small 2-stage compressor - a process that takes about 1 1/2 hrs. - using the original anhydrous fittings on the tank. To clean the tank out before he first used it, he opened it up and let it sit exposed to the air for a couple weeks to allow any remaining anhydrous to escape.

The only modification to the tank was the mounting of a couple toolboxes and an air compressor on top of it. Wessels says he couldn't weld anything directly to the tank because that could crack it so he had three lengths of 4-in. channel iron rolled to fit the curvature of the tank. He fit them over the top like a saddle and clamped them in place with straps that run underneath.

He pulls the big tank around the yard with a garden tractor.

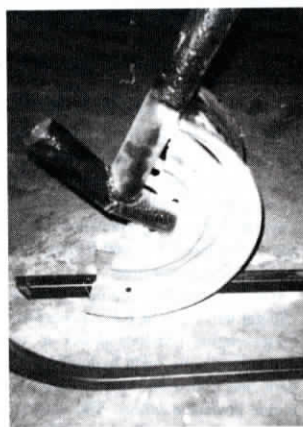
Contact: FARM SHOW Followup, Roger Wessels, Fairbury, Ill. 61739 (ph 815 692-2008).

## Home-Built Pipe Bender

Vo Ag teacher Van Reed Jr. and his students at Macomb High School, Macomb, Okla., built an inexpensive square tubing bender out of scrap material including a 15-in. car rim cut in half, a 4 ft. long, 2 3/8-in. dia. pipe handle, a 2 1/2-in. dia. open-ended pipe, and a 3-in. long, 1 1/2-in. wide curved length of channel iron.

"We built it because we needed a bender that was simple and inexpensive and could be used by one person," says Reed. "We tried using a cutting torch to make bends on 14 ga. tubing, but it caused the tubing walls to collapse. We also used the torch to wrinkle bend the tubing, but we didn't like the way it looked. I patterned the idea after an electrical conduit bender. Our bender is simply a heavier duty version. It makes a perfect 90 degree arc without collapsing the tubing. We've used it to bend up to 1 3/4-in. dia. sq. tubing for building hog farrowing crates, towable feed trough runners, and picnic table runners."

Reed welded the 3 in. long channel iron across the wheel rim and welded one end of the 2 1/2-in. dia. pipe to the wheel hub. To bend the tubing, he inserts it into the slot between the channel iron and wheel rim, then slides the 4-ft. long handle into one of the open ends of the 2 1/2-in. dia.



pipe and pulls backward. When the handle reaches the ground, it has made a 45° bend in the tubing. Then he slips the handle out and slides it into the pipe's other open end to complete the 90° bend.

Contact: FARM SHOW Followup, Van Reed Jr., Vocational Agriculture Dept., Macomb High School, Macomb, Okla. 74852 (ph 405 598-2716) or Rt. 1, Box 10, Macomb, Okla. 74852 (ph 405 759-2518).

## Loader Ladder Great For Shingling Roofs

"Time is short and we have a lot of buildings on our farm to take care of. This loader ladder is solid and stable and lets us work fast and safely," says Len Digney, Raymore, Sask., who built a 5-ft. wide ladder that attaches to his tractor bucket and grapple fork.

The 20-ft. ladder attaches to hinged mounting brackets on either side of the bucket. The side rails have metal bracing that doubles as hand rails and 2 by 4's were used for the steps. Digney chains the ladder to the grapple fork on the loader which allows him to move the ladder in and out hydraulically.

"It's so solid we can even put a small ladder on the top platform," says Digney.

Contact: FARM SHOW Followup, Len Digney, Box 53, Raymore, Sask.



S0A 3J0 Canada (ph 306 746-4385).