#### "Fuel Tank" Round Bale Feeder

Covering round bale feeders can save a lot of hay but you could end up with a bulky feeder that's hard to load with bales. Greencastle, Penn., farmer John Newcomer came up with a slick method that he says works great.

"I used an 8-ft. wide section of an old 8-ft. dia, fuel tank from a service station. A local welding shop was cutting them up for scrap. I installed three headlocks inside one end and welded runners under it so we can pull it around with a tractor. I use the headlocks to catch cattle for dehorning, AI work, etc. The feeder can be placed along any fence row. You could put a whole row of them side by side. I use it together with a 'super hutch' for calves.

"You just place the bale in it and shove it forward with a loader as they eat it up. When the bale is about used up, just add another one from behind. Almost no hay



is wasted.

"Cost about \$200 to build, including labor."

Contact: FARM SHOW Followup, John Newcomer, 6392 Guitner Rd., Greencastle, Penn. 17225 (ph 717 597-8041)



### **Portable Water Trough**

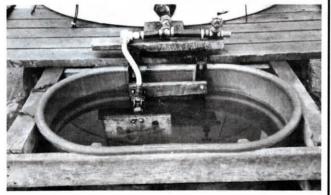
"Several years ago I started using rotational grazing for 100 milk cows, putting them on pastures up to 3/4 mile from our barn. To use this feeding method, I had to come up with a way to get water to the animals," says Rick Lawrence, Cape Vincent, N.Y.

"Professor Robert Lucey at Cornell University told me that in Germany they mount water bowls on a flatbed and use gravity to fill them from a tank mounted directly on the wagon. I tried that idea for two years but found that cows spent too much time waiting their turn to drink from the water bowls, even with three of them in place.

"So I rebuilt the tandem-axled wagon, extending the chassis of the bed out beyond the rear wheels just far enough, and the right distance apart, to accommodate a 100-gal. rubber water tank. The lips of the tank rest on the wooden frame I built around it. I also put a plank under the tank - hanging from chains - to provide extra support. I had to use big beams to make the frame of the trailer so it would hold the tank high enough off the ground and so that the trailer would have the strength to support the 1,000-gal. water tank.

"This tank lets me take water anywhere I need it. Experts say cows on lush pasture don't require much water but mine go through the 1,000 gal. in 10 hrs. on a warm day. So I'm sure I make more milk by having water easily available."

Contact: FARM SHOW Followup, Rick Lawrence, Rt. 1, Box 139, Cape Vincent, N.Y. 13618 (ph 315 654-2624).





## Home-Built Self-Propelled Grain Auger

By Janis Schole

Alberta farmer John Rozak "self-propelled" his 32-ft. long, 6-in. dia. grain auger by equipping it with hydraulic motors that not only drive the transport wheels - making the auger simple to move around the farmyard - but also raise and lower the top and bottom ends of the auger.

The hardest part of the conversion was figuring out the design. "Now it would be simple to make. Once you have all the materials, you can make it in two days," he says, noting that the only parts he had to buy were hydraulic hoses and the orbit motors.

The auger's standard 18-hp, auger motor chain-drives a hydraulic pump with a 2.5 gal. oil reservoir. An orbit motor mounts above either end of the axle, which is fitted with automotive wheels and hubs. Large drive sprockets from a salvaged swather (any make or model would do) attach to reversed brake drums on either end of the axles. Drive chains run from the orbit motors to these large sprockets. A set of control levers mount on the side

of the auger tube. The auger is steered by sending oil to one side or the other. Drive chains can be quick-detached for road travel by lowering the orbit motor frames. The chain drive from the auger motor to hydraulic pump can also be quick detached so hydraulics aren't activated during stationary use.

The bottom end of the auger is raised and lowered by a small hydraulic ram. A third orbit motor at the bottom of the auger drives a bin sweep attachment, which breaks down into pieces that can be carried on a platform between the auger wheels. A fourth orbit motor hydraulically raises and lowers the top end of the auger by driving a winch.

One modification Rozak made to the auger itself was to enlarge the diameter of the bottom 2 ft. of the auger tube from 6 to 7 in. dia. "It increases grain handling capacity by 30 percent," says Rozak.

Contact: FARM SHOW Followup, John Rozak, Waskatenau, Alberta, Canada (ph 403 358-2284).



# Poor Man's Bunker Silo

Wisconsin dairy farmer Lloyd Holterman says he's saving money and still getting high-quality silage with his "poor man's" bunker silo made out of two 200-ft. long silage bags placed parallel to each other.

Holterman told Dairy Today magazine in a recent report that he uses the bags as walls for his "bunker", filling the space in between with corn silage. He then covers it over with a \$100 tarp.

Holterman says he saved \$1,700 since the feed stored in the makeshift bunker would have filled three silo bags at a cost of \$600 apiece to fill. Eventually, he hopes to build a permanent bunker silo for his 85-cow operation but notes that his silo bag experiment is a good way to see how he likes the concept.



# Nifty Pickup Boom

"It's one of the handlest things on the farm. Lets one man handle bulky loads," says Frankie Lange, foreman of Twin Hats Ranch near Santa Rosa, Calif., about the hand-cranked pickup boom he mounted in the back corner of his pickup.

He made the boom out of 3-in. steel pipe bent to a right angle and strengthened by two cross braces. The base of the boom slips into a slightly larger pipe that's mounted permanently in the rear corner of the box (boom slips out in seconds when not needed or to move to another pickup).

A hand winch mounts on the back side of the boom arm and a cable runs up over a roller on top of the boom arm and a pulley at the end of the arm. The boom arm rotates 360°.

Contact: FARM SHOW Followup, Frankie Lange, Twin Hats Ranch, 5850 Sonoma Mt. Road, Santa Rosa, Calif. 95404 (ph 707 527-7791).