



Forks slide in or out using a hydraulic cylinder attached to a telescoping tube. Width between forks is set by inserting a pin into a hole.



"The forks can handle round bales from 4 to 5 ft. wide. The operator can insert the forks into the bale, or grasp it from both sides to keep from damaging net-wrapped bales," says Gary Machado.

## Students Built Loader-Mounted Hay Forks From Scratch

"My son and I recently built this set of hay forks for a Deere front-end loader with a local high school boy, as part of an Ag Mechanics project for a local Future Farmers of America. It has been patented and we'd like to get it in front of some people who can appreciate it and use it," says Gary Machado, Carrollton, Texas.

The 4-ft. long forks are built from 2 5/8-in. dia. cold rolled steel and are designed to slide in or out by means of a 16-in. long, 3-in. dia. hydraulic cylinder attached to a telescoping tube. As a result, the forks can handle round bales ranging from 4 to 5 ft. wide.

The telescoping tube is bolted to a frame

with quick tach brackets welded on back of it. The width between forks is set by inserting a pin into a hole.

"The operator can insert the forks into the bale, or grasp it from both sides to keep from damaging net-wrapped bales," says Machado. "The design lets you stack bales either on their ends or on their sides."

Machado says they built the hay forks in his small shop "which doesn't have a lot of high tech fancy equipment", and made all components, including the telescoping attachment and frame, from scratch.

"To build the frame we started with 1/4-in. thick steel plate and had the pieces custom cut

to different lengths, which we then welded together. I tried to teach the kids how to take measurements accurately, and clean up the plates and get them ready to weld together."

He says the hardest part was building the telescoping attachment. "The larger tube is built from 1/2-in. thick wall material and came with a seam inside it, which we had to remove in order for the smaller tube to fit."

To solve the problem, they duct taped an air-operated die grinder, along with the air hose attached to it, to a broom handle and then stuck the grinder inside the pipe. They zip tied the grinder's handle open to keep the grinder running constantly.

"The operator had to use a face shield to keep flying sparks off him," says Machado. "My son 'throttled' the compressor by controlling the amount of kink in the air hose. It took a few hours to totally remove the seam."

Machado adds that his friend Ed Stanley was a major partner and now owns the project.

Contact: FARM SHOW Followup, Gary Machado, 2111 Sequoyah Way, Carrollton, Texas 75006 (ph 469 853-8678; gmachado13@verizon.net).

## "Foolproof" Live Catch Mousetrap

"You can catch mice like crazy with very little expense and no poison," says Dave Cassens, Grafton, Ill., about his new live mousetrap. "This trap is practically foolproof. You can catch one mouse after another in it."

The "Best Mouse Trap Ever" consists of an 11-in. long, 8-in. dia. cone made from ABS plastic covered by mesh screen. The top of the trap is solid plastic with an entrance hole in the middle. The rest of the trap is all wire mesh, which allows mice to smell and see the bait. A removable plastic tray at the bottom has a divided bait cup for feed and water.

The mouse climbs up the mesh and jumps through the hole. To release the mouse you simply remove the bottom tray.

"There's no doubt that this trap will catch lots of mice. One farmer put 3 of my traps in his barn a few weeks ago and has already caught 109 mice," says Cassens. "The hole is big enough for young rats, and we've even caught a chipmunk in it. You can dunk the mice in a bucket of water and kill them in seconds."

"There are no moving parts so there's nothing to break on it, and there's no poison. The built-in food and water system allows mice to live for weeks in the trap, so if you're not home for several days you don't have to worry about the odor from dead mice. Every so often you can just hose off the trap, or put it in a deep sink with bleach and it will clean

up like new."

According to Cassens, the plastic at the top of the trap is so smooth that once mice get in they can't crawl back out. It's also hard enough that they can't chew through it.

The trap sells online for \$19.95 including S&H and is also available in some stores.

You can watch mice getting caught in the trap on youtube by going to [www.bestmousetrap-ever.com](http://www.bestmousetrap-ever.com).

Contact: FARM SHOW Followup, Dave Cassens, CasMac Innovations, 1446 W. Main St., Grafton, Ill. 62037 (ph 618 786-3614; david.cassens@cassensbait.com; [www.bestmousetrap-ever.com](http://www.bestmousetrap-ever.com)).



Mouse climbs up trap's mesh sides and jumps through an entrance hole at top. To release the mouse you remove a plastic tray at bottom.

## Slick New Way To Handle Big Tires And Wheels

Greg Grengs is a North Dakota farmer and inventor who frequently changes wheels on his sprayer and tractors. He recently came up with a tool to handle that sometimes dangerous job.

"My Tire Jogger makes easy work of removing duals or changing other big tires around the farm. It uses hydraulic cylinders to grab, hold, and rotate large tires from the safety of a skid steer. It has 2 large metal 'arms' that are 4 in. wide and 16 in. long to securely grip and hold the treads on large tires."

Grengs worked through 3 prototypes before he was satisfied with the finished product. He made it strong enough to handle up to 2,000 lbs. He took his prototype to a North Dakota farm show last winter and received several orders. Now he offers 2 versions, one that hydraulically squeezes and manually rotates

a wheel for \$4,400 and a \$5,400 version that squeezes and rotates hydraulically.

Grengs says the Tire Jogger fits any skid steer with a universal mounting bracket. Machines 60 hp or larger are recommended because weight is carried well in front of the machine. Although the Jogger will work on tractor loaders with a Universal bracket, Grengs discourages that because it's difficult to see and operate the Jogger from a tractor cab. He says a skid steer works much better because it has hydrostatic drive to inch forward or backward, and the operator has a clear view of the operation in front of him.

Contact: FARM SHOW Followup, Greg Grengs, Tire Jogger, 242 3<sup>rd</sup> Ave. W., Sherwood, N. Dak. 58782 (ph 701 263-7397; [augerjogger@hotmail.com](mailto:augerjogger@hotmail.com); [www.augerjogger.com](http://www.augerjogger.com)).



Tire Jogger uses hydraulic cylinders to grab, hold, and rotate large tires from the safety of a skid loader. Two large metal "arms" securely grip and hold the tire.