

Wood Frame Tractor Only Needs Drive Chain

Cliff McNames is looking for drive chains for his rare wood frame tractor. He has restored or replaced nearly everything else. He's also looking for any information anyone has on the mystery tractor.

"I went to preview stuff at an auction and saw it in the trees," recalls McNames. "I asked the owner, and he said it was going to be bulldozed with the trees when the sale was over. He said he would sell it to me for \$25."

When McNames went to pick it up after the sale, the rotted wood beams literally fell apart. He propped the surviving pieces up on bricks on his trailer.

"I could tell it wasn't homemade," says McNames. "All the bolts were countersunk, and the wood edges were beveled. The differential had pretty complicated gearing. Without it, the drive chains to the rear wheels would have broken when turning."

The tractor was missing an engine, the drive chains and a lot of wood. While the steering wheel and the seat spring survived, the seat was shot, as were the rear wheel rims, which were also wooden. Because of how much the frame had disintegrated, McNames had to guess a bit on original dimensions. He restored it to about 10 ft. long and about 6 ft. wide.

"I think the original wood was oak, but I replaced the beams with black locust, which is about half an inch from being rock," says McNames. "The four main beams are 4 by 6 in. and required a lot of deep holes be drilled through them. I got good at sharpening bits."

The 3-ft. dia. rear wheels were oak with a sheet metal band to protect them. Spokes were steel bolts a few thousands of an inch bigger than 1/2-in. in diameter. About a quarter of the original cast iron lugs remained.

McNames could tell the wooden wheels

had been about an inch thick, steam bent and cut only at the joint. It appeared the 1-in. board was bent in place with the spokes used to pull it to final shape.

The wooden wheels were tough to duplicate. In fact, it took McNames 7 years to come up with an alternative that looked similar. He gave the wheels solid steel rims cut from large pipes and lined them with curved pieces of plywood. He made new spokes, and a friend cut new lugs with a plasma cutter.

Although the 20-in. dia. front wheels were solid steel, they ran on a tapered 4 by 4-in. wooden axle. McNames could see where a previous owner had used a torch to burn holes through the hubs to get oil to the axle ends. He replaced the axle with new oak and tapped the holes for grease cups.

Tackling the spider gear differential was frustrating. Every large beam is essentially a pillow block for the differential. Once the holes were drilled, he mounted the differential.

The belt drive from the engine runs to a large belt pulley on the differential. Sprockets mounted to driveshafts from the differential sit outside the main frames where they chain drive the rear wheels.

"The cast iron, detachable type, link drive chains are missing," says McNames. "All I have are three of the original links. Without them, I can't drive the restored rear wheels."

Until he finds replacement drive chains, McNames has adapted a drive axle from a homemade tractor he bought at the same sale. It used McCormick binder wheels with drive chains that he could find. He had to make a new rear axle to mount the wheels on the wooden tractor.

Replacing the engine was also a challenge.



When Cliff McNames found this rare wood frame tractor (above) it was in poor condition, and he has since restored or replaced nearly everything on it. Photo at left shows him with new and old tractor wheels.

Without knowing the origin of the tractor, McNames could only guess at how it was powered. He assumes the tractor was used for moving a stationary steam or gas engine from place to place. The wheels and drawbar suggest it wasn't used for heavy pulling. The differential allowed the engine to power its own transit.

"I put a 1,100-lb., 1913 Fairbanks Morse Model H engine on it," says McNames. "It

runs about 2.2 mph forward only with no reverse. It steers with chains and takes about 20 ft. to turn."

Check out the video at farmshow.com to see the tractor in action.

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Mobile Factory Cans Meat For The Poor

By Dee Goerge, Contributing Editor

"To my knowledge this is the only mobile cannery in the world," says John Hillegass about the mini mobile factory he manages that travels across the country canning meat that's donated to the poor.

Hillegass is Canning Coordinator for the Mennonite Central Committee (MCC), a ministry of Anabaptist churches including Mennonites, Amish and Brethren in Christ congregations.

Much of the canned meat – mostly turkey – goes to developing countries where it's distributed through MCC partners to orphanages, schools and others affected by natural disasters. Thanks to thousands of volunteers, the cost per 2-lb. can (including shipping) is just \$3.70 to \$3.80. It's a welcome and important addition for people who live on mostly grains and vegetables.

The ministry started in 1946 in Hesston, Kan., when Mennonites built a mobile cannery to can beef to send to European refugees during WWII. The canner traveled around surrounding states until 1952, when it was donated to the MCC so that other Anabaptist communities could be involved. The current mobile cannery is the third unit and was built in 1993. It has six pressure cookers that hold about 140 cans/each. It's capable of canning 10,500 lbs. of meat/day with a full crew of volunteers.

Four men in two crews volunteer for two years to manage the mobile cannery. They recently completed their latest run from Oct. 8 to May 2, traveling to 33 locations in 14 states from Kansas to New York and across Canada. At each site, volunteers were ready with meat and supplies valued at \$15,000 to

\$16,000/day, for canning sessions that last from 2 to 8 days.

"Most of the meat comes in big 2,000-lb. combo bins, like whole turkey thighs," Hillegass explains. "At some locations it's cut up into chunks if we have the help. If not, we use a mechanical grinder. We need a minimum of 30 to 35 people, but can use up to 400 people a day if cutting by hand."

The meat is purchased from federally inspected facilities and the mobile cannery operates under USDA inspection. At each site, the mobile unit folds open on the sides and is parked next to a building set up for the prep work. Volunteers partially cook the meat, put it in cans, and wash, label and box the processed meat. The trained canner operators seal the cans and operate the pressure cookers.

It's not difficult to find places to send the more than half million cans each year. Many were sent to Haiti after the 2010 earthquake and some of the meat stayed in the states to feed victims of Hurricane Katrina.

"The need is there, and the volunteers are willing," Hillegass says. "We'll do this as long as we can meet all the federal regulations."

He added that the canning schedule is full, so no more sites can be added. People who would like to help can contribute cash, help at the scheduled sites, and pray for the ministry, he says.

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John Hillegass and crew travel across the country canning meat to donate to the poor.



Thanks to thousands of volunteers, the cost per 2-lb. can is just \$3.70 to \$3.80. Much of the canned meat goes to developing countries.