



Civil War cannon's wheels are 9 ft. in diameter; the fiberglass bore can handle bowling ball-sized shells.

He Built His Own Civil War Cannon

"All my life I wanted a cannon like this," says Larry Ahlman, who runs a large gun shop located in the middle of farm fields near Morristown, Minn. "It's modeled after a 1841 cannon that was used mostly by the Confederates. I got all the pictures I could find and made drawings from them."

The cannon's wheels are 9 ft. in diameter and the fiberglass bore can handle bowling ball-sized shells.

Ahlman started with 14-in. plastic pipe. He then built a form around it out of increasing and decreasing diameter rings of plywood. He wrapped the framework in fiberglass.

"I used my grandson's basketball for the cascabel (the ball shape at the end of the cannon)," chuckles Ahlman. "The inner wheels were made from big telephone wire spools with 1 1/4-in. steel spokes. The hubs are bottoms of 5-gal. pails."

Ahlman mortised 6-in. wood fence posts

with grooves to cover the steel spokes and then filled in the grooves with more wood. The outside rim of the wheel was built up with plywood covered by rubber belting.

The axle was made out of wood, as was the carriage, which is hollow to reduce the weight. Even using plastic and fiberglass where he could, the entire cannon weighs about a ton. The two wheels alone weigh more than 600 lbs.

"It's well balanced," says Ahlman. "One guy can lift up the tongue and roll it around."

While the cannon can't be fired, it's still getting lots of attention sitting in front of Ahlman's Morristown, Minn. store.

Contact: FARM SHOW Followup, Ahlman's Gun Shop, 9525 W. 230th St., Morristown, Minn. 55052 (ph 507 685-4244 or 507 685-4243; larryahlman@hotmail.com; www.ahlmans.com).

**FARM
SHOW**



Home-built pedal boat floats on eight 30-gal. plastic drums, and is fitted with a wood and plastic seat set on a plywood floor.

Home-Built Pedal Boat Floats On Plastic Drums

Old 30-gal. plastic drums can be used to make a low-cost pedal boat, says Loren Smith, Kellogg, Minn., who used four 30-gal. plastic drums on each side.

The paddleboat is fitted with a comfortable wood and plastic seat set on a plywood floor, and is propelled by pedaling a large wooden paddlewheel.

"It's built strong, is fun to ride, and provides great exercise," says Smith. "My total cost was only about \$250."

Smith got the 30-gal. plastic drums from a local feed and dairy supply store. The drums originally contained liquid soap used by dairymen to wash their milking machines. He washed out the drums, then waterproofed the plugs on each drum by caulking the threads. The drums were then placed end to end with the plugs bumping against each other.

He used 3/4-in. thick plywood for the platform, which is connected to the drums by a metal framework. He bent a pair of 2-in. wide, 1/8-in. thick metal bands to go around each drum, then bolted the bands together at the top. Angle iron bracing runs at a 90 degree angle from the drums up to the platform.

The seat was made by putting together a "build-it-yourself" lawn bench that he bought

at a store. It includes a pair of plastic chair ends with slots for 2 by 4's to fit through, and is bolted to the plywood floor.

The water wheel revolves on a 5/16-in. dia. metal shaft with pillow block bearings at each end. The paddles are made from 1 by 4, 3/4-in. thick boards set inside an angle iron frame that's welded to the shaft and contained inside 4 old skil saw blades, which are also welded to the shaft. A bicycle sprocket mounted in the center of the shaft chain-drives a jackshaft, which in turn chain-drives 2 sprockets connected to a pair of bicycle pedals located ahead of the seat.

The pedal boat is steered by holding onto a knob that's attached to the front fork off a bicycle. The fork runs down through the platform and is bolted to a wooden board set on edge, which serves as the boat's rudder.

"At first the back end of the pedal boat sank too deep into the water, so I moved the seat forward which solved the problem. I also added a patio umbrella to shade the riders from the sun," notes Smith.

Contact: FARM SHOW Followup, Loren Smith, 58861 County Rd. 84, Kellogg, Minn. 55945 (ph 507 421-9996).

Boat's electric-powered outboard motor is powerful and fast enough to pull water skiers.



Powerful Electric Outboards

A new electric-powered boat motor made in Australia is powerful and fast enough to pull water skiers. The 13 kW electric outboard motor (20 hp) has been popular with boaters in Europe since Aquawatt started selling them in 2009. According to owner Dominic de Vries he currently ships the 20 hp motor to North America for about \$10,000.

His company recently started selling a 30 hp motor for \$12,000 – the world's most powerful electric outboard motor.

"Anyone who can install a car battery can install this electric engine," de Vries says. "It comes with clear instructions and operates at under 50 volts (low voltage) so no electrician is required."

At least four 12-volt batteries or a lithium battery pack power the engine. They can be

charged by electricity from the grid, generator or solar, using a kit the company can supply.

"The motor is fully maintenance free," de Vries says. "No brushes. No magnets. It's fully enclosed."

The engine can be set up for tiller handler steering or remote steering. Fully charged, you can run the engine at average speeds for 1 to 2 hours. Range can be extended with more batteries or with the use of an on-board generator.

With growing interest in the U.S., Aquawatt is considering adding a U.S. dealer. (Check it out at <http://www.youtube.com/watch?v=SrqvDiNyYY&feature=related>)

Contact: FARM SHOW Followup, Aquawatt Australia, P.O. Box 651, Trinity Park QLD 4879 (www.aquawatt.com.au).



Paddleboat's platform is connected to drums by a metal framework.