ling

om/

"Log-Claw" Arch Lifts Both Ends Of Log

"It lifts the log from the front and back at the same time so I can get logs out of the woods fast, and without getting a lot of mud and dirt on them," says Edward Hollmen, Marion, N.Y., about his home-built "Log-Claw" log arch.

Hollmen operates a sawmill and hauls a lot of big logs out of the woods. Some of the logs weigh up to 1,500 lbs. He looked at the log haulers on the market, but then decided the best way to do the job was to build his own. His 2-wheeled model is equipped with an adjustable ball-type trailer hitch on front, and operated by a remote-controlled winch.

"With most commercial log haulers there's no way to lift the front end of the log off the ground, and no way to secure the log without using chains. My Log-Claw lifts the entire log off the ground, and it works fast," says Hollmen. "I can pick up the log and head out of the woods in just 30 to 40 seconds.

"I use my Deere 4100 4-WD, 20 hp tractor to pull it. It'll lift logs up to 24 in. dia. by 12 ft. long with no problem."

The arch is equipped with a batteryoperated winch, a big claw on the back, and a pair of steel lift prongs up front. The winch cable runs around a double pulley system on back of the machine and then forward to the lift prongs.

The claw is fitted with a pair of metal bars that pivot at the middle and are connected, forming an overcentered cam. As the claw is lowered the bars contact the log and pivot upward, causing the claw to grasp the log. At the same time, the cable drops the front lift so the prongs can pivot under the front end of the log.

"The cable doubles around at the tongs and then goes up over a pulley and on toward the front, where it goes around another pulley and down to the lift prongs," says Hollmen. "As a result there's twice as much pulling power on back as on front, which is necessary because the back end of the log is raised first and requires the most lifting power."

The log arch has a sliding support in the center, so if the log is too short to reach the lift prongs on front a chain can be used to steady it. If Hollmen wants he can also wrap a safety chain around the log, hooking the chain onto slots cut into the back part of the machine's frame to secure the log for long distance transport.

Hollmen spent about \$700 to build the log arch and cut all the parts on his home-built



Edward Hollmen's 2-wheeled log arch is equipped with a big claw on back and a pair of steel lift prongs up front, which together lift the entire log at the same time.

CNC plasma table. He says he plans to build a longer hitch that will let him also use his truck to pull the log arch.

Contact: FARM SHOW Followup, ehollmen@gmail.com.

Lift prongs are located behind log arch's adjustable, ball-type trailer hitch.



"Pincher" Turns Tractor Into Nifty Log Skidder

Tom Repko has the ideal attachment to turn your tractor into a log skidder. The mechanical engineer and woodlot owner developed the 3-pt. hitch skidder to harvest firewood and thin Douglas fir trees on his 40 acres of mixed timber and oak savannah near Dallas, Ore. It works so well he started Small Wood Lot Tools, LLC, and sells the skidder attachment for \$500 (plus shipping).

The low cost and simplicity of his attachment set it apart from other tractor-mounted skidders (hydraulic grapples start at about \$3,000), Repko says. But his biggest focus is on safety.

"The majority of the pulling load is from the tractor drawbar," he says. The idea is to keep the pulling load below the rear axle on the tractor's drawbar."

With the skidder attachment, the operator does everything from the tractor seat. He or she can lower the scissor tongs onto a log until the 1-in. gripping spikes on the tongs are below midpoint, then raise the 3-point hitch and drive away.

"It's like ice tongs," Repko says. "The weight of the log keeps the spikes engaged."

To release the log, simply lower the 3-point, and the spikes release. Drive the tractor forward and the pull chain pulls the

tongs clear of the log.

The skidder can handle log diameters up to 22-in., and Repko has tested it with 16 and 38-hp. tractors. Customers have used it on up to 64-hp. tractors. Smaller tractors are limited in the size of logs they can pull, but 25 to 45 hp. tractors are ideal for the skidder. They have enough power and can maneuver better in the woods.

Repko adds that he uses the skidder in numerous ways such as pulling down hung up trees, lifting entire trees off the ground for easy firewood cutting or limbing, and even log stacking.

One of the things Repko likes most about the skidder is that for most skids he doesn't have to get off the tractor.

"Poison oak (and blackberry vines) are very prolific in this area," he notes, from experience cutting 8 to 10 cords of firewood each year. "This tool helps avoid contacting those hazards."

The skidder has been on the market for 4 years and sold mostly to woodlot owners and woodlot association members. Some have been shipped overseas.

"It's not intended for large commercial operations, but some have been purchased for small-scale logging," Repko says.



Tom Repko developed this 3-pt. mounted skidder to harvest firewood and thin Douglas fir trees on his 40 acres of timber. He now manufactures units for sale.

The attachment is powder-coated and weighs 75 lbs. (Shipping costs vary according to location, but a recent delivery to Maine was about \$80.)

Repko also sells optional accessories on his website – quick hitch adapter, drop-on hitch receiver, and a choker and clevis.

Contact: FARM SHOW Followup, Tom Repko, Small Wood Lot Tools, LLC, 2080 Cherry Knoll Rd., Dallas, Ore. 97338 (ph 503 949-2209; www.smallwoodlottools.com; sales@smallwoodlottools.com).



"The majority of the pulling load is from the tractor drawbar and below the rear axle," says Repko.

No Ramp, Easy-Load Trailer

Drop deck tilt trailers from Kemco Manufacturing make loading any equipment easy, but especially low clearance machines like scissor lifts and forklifts. Ervin Miller, Kemco, says the trailers offer a loading angle of less than 10 degrees.

"These trailers were designed for anything that can't get up a ramp," says Miller. "They also work great for skid steers and other equipment."

The lowboy bed is mounted on hydraulic lifts powered by the on-board electric over hydraulic system. The single axle, 12-ft. long, 60-in. wide model can lift and carry 5,000 lbs. The 16-ft. and 20 ft. long, 80-in. wide, double axle models can lift and carry 10,000 lbs. Miller is currently field testing a triple axle unit with even greater carrying capacity.

Base prices are, \$7,294 for the 12-ft. model, \$9,411 for the 16-ft. model and \$10,000 for the 20-ft. model.

"Our trailers are loaded with options, including hardwood decking, winches, wireless remote for up and down, multiple tire options and custom colors," says Miller. "We also offer on-board trickle chargers and solar chargers. The on-board battery recharges through the auxiliary plug on the truck."

The trailers are equipped with LED brake and safety lights and torsion suspension with full torsion axles. "We wanted to avoid the problems such as tire wear and turn-out that can occur with stub axles," says Miller. "Our torsion axles ensure good tire life and smooth rides."



Drop deck tilt trailers from Kemco offer a loading angle of less than 10 degrees, so they work especially well for loading low clearance machines.

All on-board electronics and hydraulic systems are enclosed in the systems box over the hitch at the front of the trailer. It also provides space for load straps, chains and tools.

"Safety is a big concern for us," says Miller. "We weld the fenders on for strength and include locks on safety chains so they don't have to be twisted to the right length."

Contact: FARM SHOW Followup, Kemco Mfg., 617 E. Plymouth St., Bremen, Ind. 46506 (ph 574 546-2025; embremenbroach@gmail.com).