

Angus built his attachment to clear trees and brush on his property.



## He Built His Own Grapple Fork

After a tornado ripped through the Butler, Ohio, area almost 2 years ago, George Angus decided to build a grapple fork from scratch to fit his John Deere 2440 tractor that would help him with the cleanup.

"I'm not one to make drawings or design formal plans as I tend to change things too much on the go," Angus says. "I looked online and at new grapples to figure out how to build mine."

He decided to go with a straight bottom rather than curved like many manufactured grapples, to keep it simple and workable.

The long-time welder and part-time farmer bought stock metal for the project. He used 3/8-in. plate steel for the nine middle bottom teeth and 1/2-in. steel for the two outer teeth. For the main frame and cross braces, he chose 2 1/2-in. square tubing. To create the

curved top grapple fingers, he ordered 1/2-in. replacement box scraper rippers and welded them in place. A hydraulic hose to the rear of the tractor operates the hydraulic cylinder for opening and closing the fork.

"It opens up almost vertically and gets a big bite," Angus says. "I hauled out over 50 pine trees from the woods, some up to 1,000 lbs. The grapple fork also has a variety of other uses like picking up and moving brush piles or handling straw bales."

Angus estimates he spent about \$1,200 on the grapple fork materials, not counting the hydraulic ram which he already had.

Contact: FARM SHOW Followup, George Angus, 6362 Bunkerhill South Road, Butler, Ohio 44822 (ph 419-564-0524; peteangus9@aol.com).

Propel Automation has added door guides and winter options to their door opening systems.



## They Motorize Sliding Doors

Propel Sliding Door Automation has been opening and closing sliding shed doors for more than 10 years (Vol. 37, No. 5). The same basic system is unchanged.

The 24V DC motors open and close the doors. With power running through the rail above the header, there's no need for wires to the motors. As with overhead garage doors, once closed, the doors are effectively locked, with no need for other locking hardware. The system shares other similarities to overhead openers, such as if doors encounter an object when closing. The motor overload signals the controller to reverse to opening mode.

What has changed is the addition of door guides and winter options. The guides that keep doors running straight are usually spaced 6 to 7 ft. apart in the concrete lip. They're designed to be driven over with anything rubber.

"We now have the option of laying a gutter cable under the doors," says Mark Gazda, Propel Doors. "We put a 1/4-in. saw kerf in the concrete under the door and tuck in the cable. It only costs about a dollar a foot, but it gives you a 7 to 8-in. swath of dry concrete."

Another change is the addition of covers for the door operators. Originally, the operators that control the motors were placed inside the building. The covers allow them to be placed on the exterior.

"Exterior placement of the operators will open up new applications of the openers," says Gazda. "We plan to add solar power

options."

Gazda notes that weight is not a challenge for his door-opening system. "Most doors are designed to be pushed open by an average human," he says. "However, we've done 1-ton doors for a steel company."

Propel Doors has a smaller system for small doors. The company has even installed drive-thru systems.

"They were all remote-controlled, so the vehicle could drive in the front and out the back," says Gazda.

Gazda founded the company after developing an idea that came up over coffee. While he now has a partner taking over the operations, he has plans to complete before retiring.

"We'll be introducing a lot of new products," says Gazda. "Before I retire, we want to do gates, sliding glass doors for homes and various types of shutters, as well as storeroom gates for inside businesses."

Pricing for Propel door systems is based on the width of the opening and one or two doors. Gazda estimates a dealer installation of openers for two 15-ft. wide doors would run about \$750. "We provide everything needed to install and use," he says.

Contact: FARM SHOW Followup, Propel Sliding Door Automation, 19064 Thornbrook Rd., Carlisle, Ill. 62626 (ph 217-306-1756; mgazda@propeldoors.com; www.propeldoors.com).

## Angled Scraper Prevents Mud-Packed Duals

Prevent tire damage from mud buildup in combine duals with scrapers from Don Siegel. Unlike other scrapers on the market, Siegel designed his to work at an angle. It scrapes between duals and between the inside tire and the combine.

"Other scrapers are perpendicular to the wheel, and mud builds up like a beaver dam, pushing shields in and even wearing holes in the inside tire from mud rubbing," says Siegel. "Mine work like a mold-board plow turning over sod. Everything is at an angle, except for the base plate on the axle. The tires grind the mud to the paddles, and the mud slides off, whether in forward or reverse."

Siegel came up with the design after looking for an effective scraper for years. When the prototype worked as he'd hoped, he applied for a patent.

"I've used it on my combine for about 6 years," says Siegel. "I've never had a problem with it. I did have to redesign it to work with the new extra wide duals. They have only 1 7/8-in. clearance."

Siegel has one design for Case IH combines (\$8,000) back to the 72 Series and another for Deere combines (\$8,500) back to the 9960 through the S Series. The Case IH model has an attachment point to the axle and two braces to the combine. The Deere model attaches to the axle and the planetary. A side scraper adds \$300 to each model.

Having farmed for 50 years, Siegel knows how important it is to keep things simple. He designed both models for ease of installation. Both models simply bolt on. Siegel estimates a 3-hr. installation by two persons. No lift equipment is needed.

"You don't have to take shields off or drill holes to install the scraper," says Siegel. "Once it's installed, you can still get



Siegel came up with the design after looking for an effective scraper for years. When the prototype worked as he'd hoped, he applied for a patent.

shields off. The mounts don't interfere with anything."

Siegel has done only limited marketing of the new scraper and sold some in his home state of Illinois and Michigan. "I'm starting to get the word out," he says. "We're higher priced than the competition, but ours work and theirs don't. There's nothing else like it."

While his current products are only designed for combines, the patent applies to any piece of equipment that needs a scraper. The angled design of his scraper, with its suspension from above the wheel, was unique enough to warrant a patent in record time.

Siegel understands harvest weather will have the greatest impact on sales. "If we get a wet year, everyone will want one," he says. "It'll take time to get off the ground."

Siegel is selling the scrapers direct and through several dealers.

Contact: FARM SHOW Followup, Don Siegel, 11740 N. Church Rd., Minooka, Ill. 60447 (ph 815-252-2689; donsiegelllc@yahoo.com; www.donsiegelllc.com).



Variable-speed H-frame press cylinder can travel back and forth and slow or speed up as needed.

## Customizable Hydraulic H-Frame Press

Leroy Oberholtzer of Greenwich, Ohio, has designed a hydraulic H-frame press that has a 220-volt electric motor with a variable-speed pump. The cylinder rolls back and forth, allowing for 30 in. of travel up and down and 16 in. of travel on the stroke of the cylinder. Overall, it applies up to 30 tons of pressure.

"We made this press to solve our family shop problems," says Oberholtzer. "It was hard to find a tool that allows for this range of flexibility. Once we made it, we thought we could manufacture it as other people have the same problem."

What sets his H-frame press apart is its variable speed and the ability to have the cylinder travel back and forth. "You can slow it down to almost zero inches per minute for fine detail work or ramp it up for production," says Oberholtzer. It's CNC cut and protected by a powder coat finish for extra durability. Everything but the powder coating is done

at the shop.

Oberholtzer and his sons have relied on word of mouth to spread the word about their press. They want to work with a marketing expert and connect with dealers and distributors. "We think it's ideal for farm repair shops, machinery manufacturing, and mechanic shops," he says. Custom requests are accepted, including making the press gas-powered or changing the size or strength. "We engineered this from the ground up, so we can customize it."

Each press is priced at \$5,500 but is subject to change based on customization requests. Most of Oberholtzer's sales have been local, but shipping can be arranged. Contact him directly to start the purchase process.

Contact: FARM SHOW Followup, Leroy Oberholtzer, Greenwich, Ohio (ph 419-775-6670).