

gas. It raises the boiling point of the gas without affecting the performance of the engine."

Melvin Lepper, Weldona, Colo.: "I keep a good supply of maintenance parts such as filters on hand to save time and hassle. It's especially important to have repair parts for my hay equipment on hand so I can keep on rolling when it's time to make hay."

Wyatt Parkinson, Independence, Iowa: "When installing window glass in cars or grain wagons I use Go Jo hand cleaner to lubricate the rubber weather stripping around the window. The glass slides in slick as can be, and any 'overflow' hand cleaner can be wiped up cleanly."

Gerald Sundberg, Duluth, Minn.: "To bend thinwall tubing (except aluminum) fill the tubing with sand and then plug both ends tight. The sand will keep the tubing from collapsing."

Kenneth G. Gadd, Moose Jaw, Sask.: "The shallow, 3-in. high toolbox I bolted to the side of my Case 9280 4-WD tractor really comes in handy for storing any 'flat' hand tools such as pliers, vise grips, and socket wrenches. I made it out of 1/8-in. thick sheet metal. The toolbox bolts onto one side of the tractor just ahead of the operator's platform and measures 16 in. long by 7 in. wide and 3 in. high. A divider inside the toolbox lets me separate socket wrenches from the rest of the tools. The toolbox lid opens out away from the tractor, providing a place to set wrenches or small pieces while I'm working on something."

"The nice thing about a 'flat' toolbox is that I can see whatever tool I need at a glance, without having to dig around for it. A surprising number of the hand tools I use are flat, so it's a really useful toolbox. The biggest tool I have in it is a hammer."

"I also built a similar toolbox for my Deere 9500 combine."

Roger Foster, Tower Hill, Ill.: "I needed a way to move my wire welder and tanks around the shop, and occasionally outside."



So I used the running gear and frame from an old riding mower to build a 4-wheeled welder cart.

"The running gear is built heavy enough to support the welder and my argon and carbon dioxide tanks. The real advantage is the mower's big rubber wheels roll easily across gravel, so if I need to I can take the cart outside. The rubber wheels roll a lot better than the hard plastic wheels found on most commercial welder carts."

"I stripped the riding mower down to the wheels, axles and frame and welded a metal box on back of the frame to hold the welder. The tank sets in a welded-on round metal tray, and is supported about halfway up by a U-shaped metal bracket with a chain welded onto it. The bracket is welded to the top of the mower's steering column. I replaced the mower's steering wheel with a handle made from 1-in. dia. tubing."



Dana Curtis, Bristol, Vt. (ph 585 703-2586; danacurtis@hotmail.com): "My Wheelhorse 310-8 garden tractor is a well-built old machine, but it's a bit underpowered. After stumbling across a website that sells universal air-cooled diesel engines, I decided to repower the tractor."

"The entire conversion was completed in one day with only basic fabrication and welding skills. My cost was just under \$700, including the new engine. I needed to relocate the battery under the seat to where the gas tank was. The gas tank brackets made great mounts for the battery. I adapted a driveshaft to the original drive pulley and pto clutch. The diesel engine has much more power than the original gas engine and is very fuel efficient. It came with electric start, a charging system, and a recoil backup starter."

"So far I've burned a variety of fuels, ranging from regular diesel to used automatic transmission fluid and waste veggie oil. I haven't had a chance to use the tractor in the cold with the snowblower attachment, but the engine has a glow plug and I'm told it'll start in the cold with a good battery."

"The company that I purchased the engine from also sells smaller engines that can be used to convert most any machine that originally came with a horizontal shaft air-cooled gas engine. I'd be happy to share any details with anyone who's interested in a similar conversion."

Bill Moody, Mountain City, Tenn.: Moody recently sent FARM SHOW photos of a tool he invented for doing metal roofing work. "It lets me use a cordless screwdriver



instead of a hammer and nails to do roofing work. Not only does it save time, but the screws hold better and there's no mashed fingers from driving nails."

"The tool he made is designed to pre-punch holes in the ribbing. A cordless drill is then used to drive in a 1 1/2-in. roofing screw through each hole."

"The tool consists of a spring-loaded metal 'striker' on top of an 'anvil', which is welded to a curved handle with a golf club grip. The anvil is grooved at the bottom to match the V-shaped ribbing. To use the tool, the operator sets the anvil over the ribbing and then uses a hammer to lightly tap the spring-loaded striker, which drives a hole into the ribbing."

"It punches a perfect hole every time. One person pre-punches the holes and another person comes behind and inserts the screws. It works two to three times faster than using nails. As far as I know there's no tool like this on the market to start screws in corrugated roofing, which I find quite surprising."

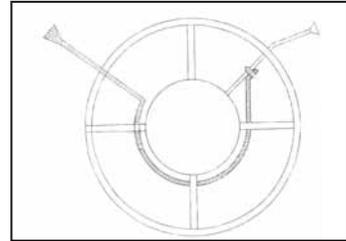
Left Hand Shifter Lets Injured Farmer Drive Pickup Normally

"Last spring my son-in-law had surgery on his right elbow and temporarily lost the use of his right arm. While his arm was in a cast, he had trouble driving his pickup. He needed a shift lever for his left hand, so we came up with one that allows him to operate the shift from the left," says Glenn Darlington, Bronaugh, Mo.

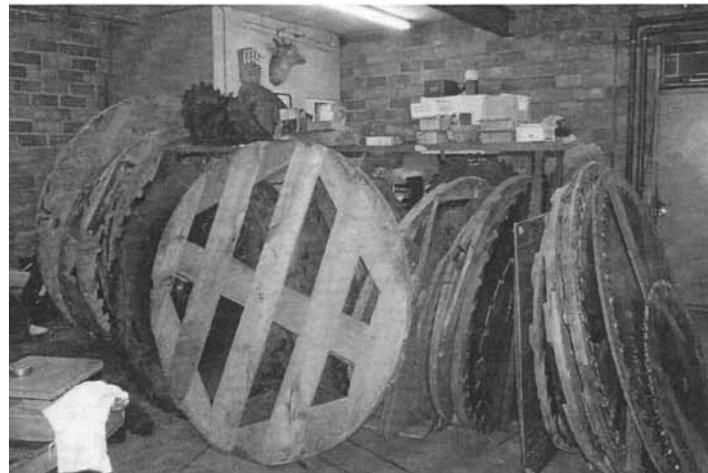
He clamped a curved metal rod to the pickup's right hand shift lever. The curved rod runs under the steering column to the left side. Pushing in and up on the left shift lever lets him control the automatic transmission lever normally.

"It allowed my son-in-law to drive with a cast on. He kept using it even after the cast was removed which enabled the elbow to heal, a process that took four months," says Darlington. "The device was easily removed as soon as he could drive and shift again with his right hand. The same idea could also be used by anyone whose right arm is weak or has arthritis."

Contact: FARM SHOW Followup, Glenn Darlington, 26490 S. 625 Rd., Bronaugh, Mo. 64728 (ph 417 922-3384).



Curved metal rod is clamped to pickup's right hand shift lever and runs under steering column to the left side.



Jim Voigt charges about \$150 to hammer a warped circular sawmill blade back in shape, a huge savings over the \$2,000 cost of a new blade.

Minnesota Shop Reconditions Big Sawmill Blades

From Alaska to Nebraska, sawmill owners seek out Jim Voigt and his saw blade reconditioning service. Customers have good reason to come to him. Voigt charges an average of \$150 to hammer a warped circular blade back in shape, a huge savings over the \$2,000 cost of a new blade.

"I was 15 when I started hammering saws," says Voigt, who is now 58. "It's Old World craftsmanship. I was fortunate to step in to it with an uncle who was very good at it."

He and his two brothers work out of the same building their father and uncle built in Rice, Minn., in 1945. While the shop has modern tools, it still has the old blacksmith shop including a forge and a line shaft that runs a Little Giant power hammer, grinder and drill press. The business is well-known as the place to go with blades that have warped and don't run straight.

"My job is to re-tension the steel, so that when they turn it, at say 600 rpm's, it's a stiff piece of metal," Voigt says.

He has a special anvil, several hammers in different weights and shapes, and straight edges from 6 in. to 4 ft. long. Voigt figures out where the blade is stretched and hammers

other areas to make it even with the right tension.

"My uncle used to say he didn't charge for hammering. He charged for knowing where to hit," Voigt says.

When reconditioned right, saw blades can last for years. Voigt has worked on blades that are older than him. The biggest blade he ever worked on was more than 6 ft. in dia., but they average between 50 and 60 in.

He gets a lot of business from mills in Minnesota, Iowa, Wisconsin and the Dakotas, but customers also ship blades to him and have driven up from as far away as Nebraska. After getting the blade to room temperature, it takes about 3 hrs. to recondition it.

As many sawmills go out of business, Voigt has noticed fewer blades coming in, but there's still plenty of demand as there are only a handful of shops that recondition blades. The Voigts also weld band saw blades and do farm repair including sharpening plow lathes and a variety of machine work.

Contact: FARM SHOW Followup, Rice Blacksmith Saw and Machine, P.O. Box 175, E. Main Street, Rice, Minn. 56367 (ph 877 224-5251).