

**Kenneth Litwiler, Barron, Wis.:** "When teeth wear down on my spring tine harrow, I cut the spring coils off one tooth, invert the piece and then weld it onto another tooth to restore it to the original length. That way, I only have to buy half as many teeth as before."

**Otto Bacon, Brimley, Mich.:** "I mounted a small hydraulic motor on the chute of my snowblower. Now I can direct snow wherever I want with a flick of a lever. It improved 'user friendliness' 100 percent."

"Rear axles off Dodge Omni cars are ready-made trailer axles. Junk yards are full of them and it's easy to fit a trailer bed to them. There are probably other front-wheel drive cars with the same type of rear axle."

"One handy shop idea I had was mounting my electric welder on an old 2-wheel hand truck. It works a lot better than the cheapo wheel kits they sell for the welder. I added a couple hooks to hang cables and helmet on."

**William D. Luebbe, Utica, Neb.:** "Here's a solution to problems with straw walker breakage in Deere 7700 combines. Just fit a wooden filler into the interior sidewall cavity near the straw walker range of travel. It prevents corn cobs from jamming and catching."

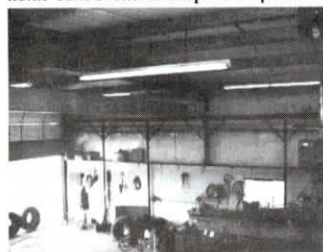
"Another idea I've had is to mount truck batteries in waterproof boat battery case bottoms. You can keep battery posts from corroding by wrapping a narrow strip of cloth soaked with grease and baking soda around the posts after securing the clamps."

**Ervin Dupper, Mobridge, S. Dak.:** "I replaced the liquid fertilizer pipes on my IHC 620 drill with larger pipes so the hoses fit inside the pipes instead of over the pipes. This new arrangement avoids plugging the pipes and makes them much easier to clean out. We've used the new arrangement just one season with good success. This drill is probably 15 years old so the old pipes were getting rusty anyway and needed replacement."



**Glen Schweppe, Schweppe Dairy Farm, Syracuse, Neb.:** "Last spring I bought two old dentist chairs that operate with electric-over-hydraulic. I took the chairs off and replaced them with 3-ft. sq. table tops. The bottoms are 2-ft. sq. with two solid wheels and two swivel casters. I can vary height of the tops from 20 in. to 46 in. so I can sit by them or stand, depending on what I'm doing. I use them for welding and many other jobs. I also attached an electric box under each table top for plugging in tools. The top is 3/16-in. metal on a 1-in. sq. tubing grid. The casters have a load capacity of 800 lbs. each."

**Harold Bowers, Caldwell, Idaho:** "My farm shop is 36 ft. wide by 40 ft. long. My home-built overhead shop crane spans the



full width and travels back and forth over the entire length, except for the 8-ft. storage

## Money-Saving Repairs & Maintenance Shortcuts

*Have you come up with any unusual money saving repair methods for fixing farm equipment? What maintenance shortcuts have you found? Have you had any equipment recalled by the factory? Name a particularly tough mechanical problem you've had with a piece of farm equipment and how you solved it.*

*These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044.*

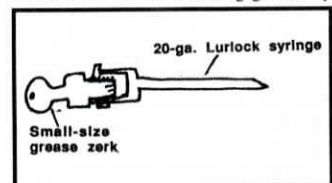
room at the back of the shop. The tracks are made out of 6-in. H-beam with inverted 1/2 by 2-in. angle iron welded on top (like upside down "V's") for the wheels to roll on. The wheels are 6-in. dia. steel with 1-in. bearings and are "V'ed" to fit over the track. I bought them from House of Wheels in Boise, Idaho (ph 209 342-3254). I made the "trucks" from pieces of 5-in. channel iron, mounted back to back, about 6 ft. long. The gearhead motor and controls are out of a commercial overhead door opener that I purchased used for \$100. I welded a chain sprocket on one wheel on each side to drive it. The driveshaft runs clear across the width of the crane on 1 1/4 in. black pipe running on pipe bearings except for 12-in. long 1-in. stub shafts on either end.

"The power cord is wired into the junction box and is hot all the time. It runs on 3/16-in. aircraft cable on pulleys so it rolls itself up one way and stretches out the other way. I have a 2-ton electric hoist running back and forth on the main beam. I roll the winch back and forth manually for now. The main beam is 15-in. I-beam with 7/16-in. web.

"I think this crane would handle a ton safely in the center which is more than I ever need. I use it for pulling truck, tractor, and pickup engines and anything else that gets in the way, large or small. I can take an engine out on one side, roll it to the other side, and then load it in a pickup box or bolt it to a motor stand.

"Previously I had an A-frame rolling hoist but my shop would get so cluttered, I couldn't roll it anywhere. This solved that problem."

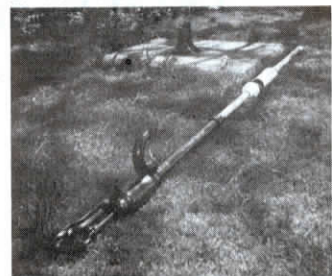
**Dan Krenz, Cullman, Ala.:** Krenz makes his own sealed bearing greaser by



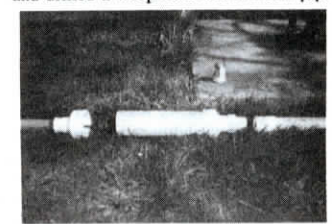
inserting a grease zerk into a 20-ga. Lurlock needle syringe. "I use a small size zerk and grind off the threads until it'll fit into the

needle. Then I solder the two together. The needle tip will penetrate rubber bearing seals by cutting a small self-sealing slit in the rubber, or you can lift the inner seal edge. Then you can give the bearing a pump of grease, spin the bearing and give it a second shot, or as much as it will hold. If you can't solder the zerk and needle hub together, use a 1/2 or 3/8-in. piece of 1/4-in. copper pipe, thread the zerk in one end, and square-form the other end to fit over the needle hub. Then flow it full of solder to lock the hub in place. To 'anti-solder' the zerk end and needle hub end, mark them up well with a #2 graphite lead pencil. Solder will not flow over a pencil line."

**John Marley, Laomi, Ill.:** When the cylinder and piston on John's old time hand pump wore out, he couldn't find a replacement cylinder of any kind to repair it. "We were able to find the leather needed



to repair the piston but no cylinder so I fashioned one out of 3-in. pvc pipe with 3 to 1 1/2-in. reducers. At the bottom of the cylinder I installed a 1 1/2-in. flapper valve and drilled a weep hole in the metal pipe



just above the cylinder section for freeze protection.

"The smooth wall of the pvc provides



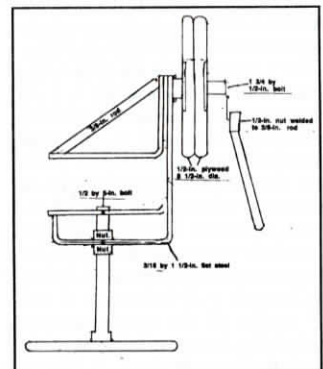
### Saw Sharpening Jig

Sharpening skill saw blades is easy with this homemade jig that clamps onto any 2-in. board, according to construction worker Ralph Todd, McMinnville, Tenn., who's used it for many years.

"I needed a way to hold blades stationary while filing them down. I've never seen anything like it on the market," says Todd.

He made the blade holder out of 1 1/2-in. wide flat steel with a spindle that holds the blade, sandwiched between two 5 1/2 in. dia. 1/2-in. plywood circles. A hand tightened hold-down bolt holds the blade tight and can be quickly loosened to rotate the blade.

A large screw-down bolt through the bottom clamps the jig to a piece of wood. "It's easy to attach and easy to use, making it easier to keep blades sharp."



Contact: FARM SHOW Followup, Ralph M. Todd, 1134 Bates Hill Rd., McMinnville, Tenn. 37110 (ph 615 939-2864).