Delbert Zimmerlein, LaMoille, Ill.: "We mounted a 16-in. I-beam across the top of our 32 by 50-ft, shop. It's supported by vertical beams that are built into the sidewall of the building and is fitted with 3 and 5-ton chain hoists. We use them to lift car and pickup front ends for oil changes, plus other jobs such as changing truckbeds.

"One money-saving repair method we came up with is a way to tighten snapping rolls on 40-Series Deere cornheads. There's a slot directly above the two 1/2-in. bolts that draw the rolls together on the shaft. I use a cut-off wheel on an offset grinder to extend that slot 1 to 1 1/2 in. farther towards the bolts. The rolls then draw together and work fine. Right now I'm using 6 very good rollers that my neighbor couldn't keep tight."

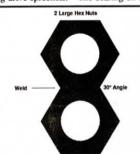
James Sheeler, Vale, S. Dak.: "I attached an 8-in. piece of curved cultivator tine to the end of a 6-ft, steel bar to use to break beads loose on rear tractor tires. The curve of the tine matches the curvature of the rim. We push on it with another tractor. It eliminates pounding and prying.

Donald Albright, Perkins, Okla.: "I have an International 990 pull-type swather. In tall grass hay, the pto shaft would wrap up. I made a guard out of sheet metal that's triangular-shaped like a Japanese hand fan - rounded at the bottom (about 14 in, wide) and coming to a point. It bolts to the underside of the tractor drawbar, mounted at a 30° slant to the ground so it pushes tall grass down and out of the way. I countersunk the bolts so they wouldn't snag. It sure solved the problem.

Curtis L. Barron, Miles, Tex.: "Here's an idea that helps start small air-cooled engines. A small amount of WD-40 sprayed into the combustion chamber aids in starting. I also put some in the gas tank. This is really a big help on my 110 McCulloch chain saw.

"A front-tine rototiller makes a good portable base for an electric welder. Remove the motor and put the welder in its place. The handle grips hold the leads."

Ben Kambeitz, Richmound, Sask.: He came up with a simple modification that helps keep bearing repair to a minimum on big drive sprockets. "The bearing on this



## Simple Way To **Sharpen Drill Bits**

"I got the idea years ago from a welding shop and I've used it ever since to sharpen drill bits," says Bert Wilkins, Yuma, Colo. about the simple drill bit gauge he makes out of two hex nuts.

He welds two large nuts together. The angle where they meet measures 30°'s which is the cutting angle of drill bits.

"It lets me sharpen bits on an ordinary grinding wheel. I just work them till they fit perfectly between the nuts," says Wilk-

Contact: FARM SHOW Followup. Bert Wilkins, 47491 Co. Rd. 34, Yuma Colo. 80759 (ph 303 848-2590)



large sprocket on our IH 300 disc seeders normally wears out in a year. I welded a bolt to the bracket that supports the sprocket and put a sealed bearing on the bolt, held in place by two nuts. The bearing rolls against the face of the sprocket, taking up the side thrust pressure. Since making this modification several years ago, I haven't had to replace the bearing on the big sprocket."

Paul Van Meter, Queen City, Mo.: "I'm 74 years old and in real good physical health except that I had a knee joint replacement recently and can't operate my three Allis Chalmers tractors which have foot clutches (1968 Series 4 gas, 1978 AC 7000 D, 1980 AC 175 D). My question is: Have any of your readers ever converted any of these tractors to hand-operated clutches?

Loren Dunteman, Balaton, Minn.: "The crimping rollers on my New Holland 694 Haybine are starting to come apart. The rubber lifts off the steel drum in spots because of nicks or cuts and when dirt from pocket gopher mounds goes through the machine, the mud squeegees in under the cut and forms a 'blister', making the rollers run rough. Once the blisters start, they grow

"I recently discovered a rubber putty kit in Gemplers 1993 Spring Catalog (ph 800 382-8473) that said it's a chemical vulcanizing material. I'm planning to cut out the damaged sections and use the product to fill in. Hopefully, it will stick to the metal part of the rollers. I'm wondering if anyone knows if this is likely to work or if there's a better way to make the repair."

Earl West, Gladstone, Mo.: "Here's a way to turn discarded shop parts into something useful. I take used sickle sections and heat them with a torch and then turn down the three corners. Then I put straps on the sections that lets me tie them to the bottom of my shoes. It's a fine solution to walking on icy ground while doing chores. I call them ice creepers.'

Joe Hagans, Urbana, Ohio: "An IH dealer told me it was impossible to put a cannister-type block heater on my 1957 model 450 tractor. So I removed the thermostat housing and drilled a hole in the housing below the thermostat and installed a brass fitting. I ran a hose from the block drain. installed a shut-off valve, and put in a block heater. Then I ran a hose back up to the thermostat housing. Works like a dream.

"Another time, a Woods dealer said it would cost \$65 to put a hydraulic lift on my Cadet 60 mower. I took some 1/2-in. flat metal plates, drilled them out, and mounted them on the gearbox and rear lift bracket. Then I installed a lift cylinder and loosened the lock collar on the manual lift screw. Can be switched back to manual operation in 5

"I used brass fittings and adaptors to install 1/2-in. pvc pipe to the end of a blow gun on an air hose and I use the extension to clean rafters and other upper parts of the



Have you come up with any unusual money saving repairs 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.



## Rolling Work Bench

Roland Beckmeyer, Hoyleton, Ill., gets a lot of use out of this home-built portable work bench

The rolling bench is equipped at one end with automotive wheels on an axle made out of steel pipe. There are two legs at the other end, braced by angle iron. The table top is a salvaged solid 3 by 6- ft. door.

Beckmeyer says the bench handles like a wheelbarrow and can be built to any height to make it easy on your back. He has a vise fitted to one end of the bench.

Contact: FARM SHOW Followup, Roland Beckmeyer, Hoyleton, Ill. 62803 (ph 618 493-6203).

Leland Jordal, Mexico, N.Y.: "I have a water pump that leaked around the driveshaft. I couldn't find a good way to plug it up until I picked up up a 3 in. by 1/8-in. rubber O-ring. I double wrapped it with Teflon pipe tape. I then wound the O-ring and Teflon tape around the shaft, covering it with more Teflon tape. The repair has worked well for years and I thought someone else might be able to use the idea on other rotating shafts."

Merlin Larsen, Corinne, Utah: "I broke an axle on a Massey Ferguson swather. The company wanted \$140 for a replacement. A local machine shop built a new one in 45 min. for just \$40, saving us money and a week's time waiting for the new part to

"I made a nifty fence repair tool by bending a 90° angle in the end of a piece of 1-in. pipe. I drilled a hole in the bent end and it now makes a great wire stretcher. You just stick the end of the wire in the hole and turn the pipe. It's easy to carry and handy to

Donald Risser, Bainbridge, Penn.: "The grass seeder attachment on my Case-IH 5100 grain drill never did work right, Bulky seed bridged up inside and drop tubes kinked whenever the wheel ran in a furrow. I finally remounted the seeder on the rear of the drill with homemade brackets. Seed now drops down short straight tubes but I still can't use bulky seed. I'm happy with the drill otherwise

"Harvester chain-type unloaders have a grease zerk near the access door to grease the center hub. This is unhandy and usually dirty. I replaced the zerk with an L-shaped fitting attached to a 12-in. length of flexible grease gun tube that's plumbed directly to a grease gun.'

Howard Fay, Leslie, Mich .: "I took the battery out of my Deere 2010 tractor and mounted it on a platform outside the frame so I wouldn't have to take the loader off to