



Peter Hansen, Gowen, Mich.: "I do a lot of welding and cutting and during the summer I usually wear a short sleeve shirt or T-shirt, which exposes my arms to a lot of sparks and heat. To solve the problem I made glove extensions for my welding gloves. I bought a pair of women's tall leather boots at a garage sale for \$1 and cut them off at the ankle. I sewed the legs of the boots to the cuffs on my welding gloves. The gloves now come up well past my elbows, providing great protection from flying sparks."

Marvin Bindig, Good Thunder, Minn.: "I have an 18 hp Briggs & Stratton engine on my riding mower. The pin the oil slinger mounted on wasn't secure. In fact, it was loose enough to allow the drive gear to get out of alignment with the oil slinger to the point that it would no longer rotate. As a result, the engine's upper rod froze onto the crankshaft and broke the rod and piston. The company won't do anything about it. I told them I would overhaul the engine if they would furnish the parts, but they refused."

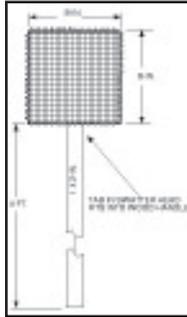
Leonard Seltzer, Manhattan, Ill.: "The wooden handles on hammers, hatchets, axes, and other tools loosen up over time from use and from changes in humidity. I came up with a way to keep a hammer or hatchet head from flying off and injuring someone."

"I reset the handle until it's tight, then drill a small hole through the center of the head. The hole should be slightly larger than a 16-penny nail. Then I place a nail through the hole and cut it off about 1/8 in. on the opposite side."

"Now I'm ready to peen the nail over as you would with any rivet. I place the nail head on a vise or anvil and use a ball peen hammer to finish the job."

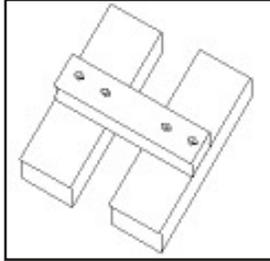
"This simple process goes a long way toward preventing an accident caused by a hammer or hatchet head from flying off the handle."

Russell Carlock, Huntingdon, Ind.: "I made a giant 4 1/2-ft. long fly swatter that looks like an ordinary fly swatter except that it's much bigger and uses a piece of 1/4-in. wire mesh hardware cloth to do the swatting. Works great on carpenter bees or other large flying insects."



"The swatter head measures 8 in. sq. The wire mesh is fastened on with wire and hog rings. A 3-in. long tab fits into notches cut into each side of the 4-ft. handle. The handle is made from 1 by 2-in. wood."

John Nicholls, South Carolina: "Here's an idea I came up with several years ago when I couldn't find a jack stand that could be eas-



ily adjusted to the correct height. Everything I had seen was either too short or too tall."

"I used 2 by 4 wood boards cut to a length



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 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 or email us at: editor@farmshow.com.

Mark Newhall, Editor

of 8 3/4 in. I ripped a few of the boards into 1 1/2-in. widths, then screwed and glued them together as shown in the drawing. Then I just stacked the boards up, interlocking them at 90 degrees, until I got to the right height. I can get the jack stand to within 1 1/2 in. of the height I need. The boards will support a lot of weight and are useful for other jobs. They're particularly handy when standing a ladder sideways on a stairway. And best of all, they're free."

Luther Newman, Clinton, Okla.: "I installed an electric plug-in socket on my Lincoln welder so I can use it to operate power tools. I removed the back of the welder and ran wire to the 110-volt socket, including a ground wire. I've found this to be a stronger current to use with my chop saw, as it won't blow a fuse like when it's plugged into a wall socket. The welder doesn't even have to be turned on, because the socket is wired separate from the welder switch."



ing properly. I cut down part of the bike frame and used it to hold the tire in position."

"I've used this idea every day for more than 10 years, and the bicycle tire has worked flawlessly."

Buddy Hoopes, Beloit, Ohio: "I like my four cordless Sears Craftsman drills. However, the one thing the company never thought of was to put a hanger hole on these tools. So I made my own using plastic nylon ties. I put one tie through the breather and another tie through the first one so that it sticks up about 2 in. above the drill. Now I can hang the drills up on my tool belt or, better yet, hang them from my work bench."

Ray Bittmann, Anoka, Minn.: "Over the years you've published several good ideas on how to free up a stuck engine. Here's a suggestion for what to do once you first get the engine unstuck. Just take out the thermostat and pour boiling hot water into the water jacket or the radiator. It will expand the cylinders and really free up the engine."

Ronald Post, Celina, Ohio: "When removing the locking collar from a bearing, I use an air chisel on the side of the collar. I have to be careful because the set screw will come sailing out. The collar will come off with ease, even if it had been rusted on."

Robert Albert Yorkey, Park Falls, Wis.: "Here's a cheap, easy way to get rid of gophers and moles around your house. Cut a big bag of bubble gum into fourths and drop the pieces into their holes or tunnels. Just don't leave the gum where birds can get it."

John Stava, Bloomington, Ind.: "After retiring from the U.S. Air Force, I worked for a man who operated a small engine shop for many years. I learned many things from him, but one stands out: Don't use starting fluid to start a small engine. These products contain drying agents, and repeated use will ruin a small engine quicker than Jack can climb the bean stalk. Instead, spray a small amount of WD-40 or fill a squirt-type oil can with the engine's recommended fuel. Squirt in a few drops through the carburetor or remove the spark plug and inject it directly into the cylinder. Two or three pulls and the engine should start."

"Rounding off corners on table tops with a drawing compass is time consuming and not always accurate. A better way came to me in a flash of inspiration. Take a tin can and set it



Duane Kuesel, Spring Valley, Wis.: "I have a silage conveyor belt that's more than 100 ft. long. Occasionally the belt will slip on the drive hub without my knowing it. One time the belt slipped for such a long time that it burned completely through. That's when I came up with the idea for a bicycle tire monitor. The tire is always in contact with the moving belt, which rotates the tire. As a result, I can tell at a glance if the belt is work-

Special covers screw onto outlet on bottom of bulk oil tank, sealing it from dripping after you close the valve.



Nozzle Caps Stop Oily Mess

"To keep my shop cleaner, I use special little covers on the outlets of my bulk oil tanks," says Gackle, N. Dak. farmer Roger Gutschmidt. "I have ball valves on the bottom of my tanks, and they used to make a mess because even after you close the valve, a little oil stays in the line and then slowly drips out, making a puddle down below. I didn't like that happening every time I dispensed oil into jugs for changing or adding oil to equipment."

To solve the problem, Gutschmidt started using what he calls "Easy-Close Oil Caps," which screw onto the outlet, sealing it from dripping.

The cap has a little lever (handle) to open and close without getting oil on your fingers, he says.

"They just hinge back and forth on a pivot pin," Gutschmidt explains. "They're real simple, and they really work. When you want to dispense oil, you simply slide the little hinged cover to the side, and open the ball valve."

Gutschmidt likes the caps so much, he



Cap has a lever to open and close without getting oil on your fingers.

also sells them.

The aluminum cap has an O-ring to prevent leakage, and is sized to fit garden hose-size nozzles.

Gutschmidt sells them for \$20 each, plus S&H.

Contact: FARM SHOW Followup, Gutschmidt Manufacturing LLC, Roger Gutschmidt, 6651, Hwy. 56, Gackle, N. Dak. 58442 (ph 701 698-2310; shopdoc@drtel.net).