

end up with the wrong size.

"You can use plumber's caps for both caps and seals. I used a hole saw to cut the cap for use as a seal, and then put another cap over it. I made this 'temporary' repair over three years ago. I expected the cap to come loose after the grease rotted the rub-



ber. But I found out they're made of a material not affected by grease, and they hold better by friction than conventional dust caps. You can find them at any hardware store and they come in a wide range of sizes.

"This solution works so well, I wonder why some manufacturer has not discovered used the idea. I think that for many jobs, it would work better than the original seal. It sure beats leaving a dust cap off and finishing a job but then having to put in a new bearing when you're done."

**Dave Lepp, Niagara On The Lake, Ontario:** "I got tired of always having to round off the tips on store-bought chipping hammers so I looked around for something better. I cut the point off a broken combine sickle guard and welded it onto the handle of my worn-out chipper. The steel is so much better that it should last forever. I made this modification three years ago and it still works great.



"To build my own parts washer I cut off a 45-gal. oil drum just above the second rib,

then hammered the rib open a little so that when I turned the top third of the barrel upside down it would fit inside, making a waist-high tub about 12 in. deep. Then I screwed a length of 2-in. dia. pipe into the bung hole extending down into the bottom of the barrel and drilled small holes about 2 in. from the bottom of the pails. The pails serve as settling tanks. Then I plumbed in a motor and pump from an old oil furnace in order to recirculate the cleaning fluid from the bottom up into the tub on top."

**Wayne Powell, Powell Implement Co., Stockton, Mo.:** "We operate a tractor re-



pair shop and recently put an entire Deere tractor into a lathe. A customer of ours had brought in his Deere 50 and asked us to repair a bearing in the clutch. When we took the tractor apart, we discovered that the bearing had cut a substantial groove in the crankshaft. We had two choices - find a replacement crankshaft or build up the crank-

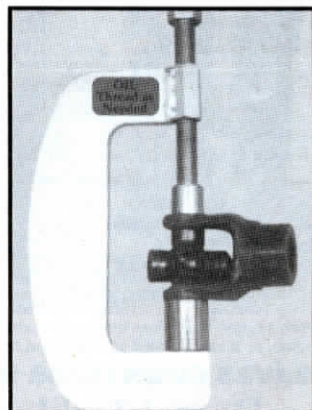
## New Tool Makes It Easy To Repair Universal Joints

"Our new tool for repairing universal joints lets one man do the job right on the machine," says Robert Rottinghaus, Clever Tech, Inc., Jesup, Iowa.

The tool consists of a C-shaped clamp and a threaded bolt with fittings for two 1/2-in. sockets - a small one that snaps onto the bottom of the bolt and a larger one that snaps onto the bottom arm of the clamp. The small socket has an inside diameter larger than the diameter of the bearing cage. Tightening the bolt presses the small socket down into the yoke so that it pushes the bearing out the other side of the cross bearing. Then turn the U-joint upside down and repeat the procedure to remove the bearing on the other side of the yoke.

To install a new cross bearing, use two sockets that are slightly smaller than the diameter of the cross bearing cage, then press them together by tightening the bolt and replace the snap rings.

Suggested retail price is \$89, with dealer discounts available (three or more



units qualifies as a dealer discount).

Contact: FARM SHOW Followup, Clever Tech, Inc., 412 S. Canfield, Jesup, Iowa 50648 (ph 319 827-1311, fax 319 827-2425).

shaft by welding on it and then turn it back down to size.

"We contacted David Marlin, owner of a local salvage yard that specializes in older Deeres (Two Cylinders Plus, Conway, Mo. 65632 ph 417 589-2634) who said that welding probably wouldn't be a good idea. He said he had several Deere B and 50 models in his yard with crankshafts broken right where they had been welded. The problem is that these models use a roller bearing that rides right on the crankshaft without an inner race, and if the operator leaves the hand clutch lever in the disengaged position for an extended period of time, the bearing and crankshaft are subject to failure.

"The cost of a replacement crank seemed too high for the customer so we started looking for another alternative. We decided to machine the crank and install a press-fit sleeve. However, we didn't want to remove the crankshaft from the engine so we started looking for ways to machine the crank while it was still in the tractor. We made a small platform out of 4-in. channel iron and bolted it to the rear axle and to the side of the tractor frame to hold a small lathe perpendicular to the crankshaft. By starting the tractor engine and letting it run at idle, we were able to run the tool feed on the lathe back and forth until we had removed the desired amount of metal.

"A local machinist made a press-fit sleeve out of hard steel. We heated the sleeve, drove it in place, and then polished the last couple of thousandths until the new bearing fit properly. The result was a crankshaft with a new life, a happy customer, and the first known instance where someone put an entire tractor in a lathe."

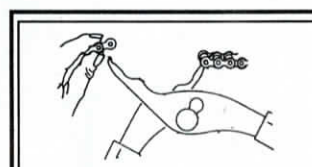
**Paul Lehman, Exira, Iowa:** "I use my Snapper riding mower to loosen up stubborn grease and dirt on my shop floor. I remove the blade and replace it with a 30-in. long brush off a floor broom, then pour Tide liquid detergent onto the greasiest spots on the floor and drive the mower back and forth over them. The spinning broom does a great job of scrubbing and loosening up the caked grease and dirt. I can raise or lower the deck to vary the amount of pressure applied by the broom. After I'm done scrubbing I use a garden hose to wash the dirt and grease

off the floor and out the shop door. It takes about one hour to clean a 40 by 50-ft. area.

"I got the idea because my shop floor was super dirty and I couldn't get hard-caked grease off. I tried using a broom as well as a cold water power washer, but it didn't help so I had to scrub it off by hand. Using the mower is much faster and costs almost nothing.

"When I want to mow grass I simply unbolt the broom and bolt the blade back on. To mount the broom, I screwed a flat strap iron onto the brush, then welded two bolts onto the strap to mount to the spindle hub."

**Al Osidsi, Melville, Sask.:** "I got tired of using a tarp strap or piece of wire to hold the hydraulic lever in place on my Deere 4020 when using it with my hydraulic driven rock picker. So I pop riveted a small hinge to the bracket to hold the lever back. When it's not needed the hinge simply folds back out of the way."



## Roller Chain Repair Tool

One person can repair roller chains quickly and easily, says John King, inventor of a new roller chain repair tool called the Chain King.

Small hooks on the tips of the tool make it easy to remove (and then reinstall) the spring clip on the master link, and to remove and reattach the "keeper". Then the tool can be used to pull the two ends of the chain together to replace the master link.

Comes in two models with lifetime warranty replacement. Chain King 650, for #35 to #50 series chains, sells for \$14.95. Chain King 800, for #35 to #80 chains, sells for \$19.95.

Contact: FARM SHOW Followup, King's Tool Co., 114 So. Osborn, Mayfield, Kan. 67103 (ph 800 205-8965 or 316 434-5471).

## 'Cord Keeper' Eliminates Tangles

Earl Weber hasn't fought tangled electrical cords in years thanks to the "Cord Keeper" he invented.

"They should be out on store counters right now," says the retired Dunlap, Iowa, farmer. "They'd be a great seller."

Weber's invention consists of six 8 in. long pieces of plastic pipe glued into a piece of wood. Cords hang in loops from the pieces of pipe and are held in place by a U-shaped metal locking gate.

One of Weber's Cord Keepers is about 12-in. wide, the other about 10 in. wide. Length and width could be tailored for any length or weight cord, he notes.

You can use the devices to carry cords around or hang them on a wall.

Weber has also patented a model for garden hoses. It uses the same principle but is made out of curved pieces of metal instead of plastic pipe.

"Cords or hoses will come off them just they way you put them on," says Weber, who's looking for a manufacturer. "They just work perfectly."

Contact: FARM SHOW Followup, Earl Weber, R.R. 1, Box 194, Dunlap, Iowa 51529 (ph 712 643-5756).

