liquid, and 8 oz. of Shaklee Basic 1 cleaning concentrate. It's considerably safer than using lye in a quench. (Ken Scharabok, P.O. Box 33399, Dayton, Ohio 45433-0399)



We're sending along photos of a bulk soybean seed wadon we put together using an older United Farm Tools auger cart. After removing all the worn out augers, we mounted a hydraulic-driven belt conveyor on the rear to move seed to the drill. It holds about 400 bu, and sure beats handling all those bags. The conveyor rolls easily from side to side across the width of our 15-ft. grain drill riding on a cable and pulley that runs across the rear of the wagon. After we got everything working on it, we gave it a paint job and fitted it with a roll-up tarp. the tractor supplies the hydraulics. We can still use it in the fall as a bottom-dump grain cart. (Vernon Isaacs, 3220 Linson Rd., London. Ohio 43140)

The Nebraska Tractor Test Laboratory has reissued a publication which was discontinued in 1986 called "Power and Fuel Consumption Tables" by Louis I. Leviticus, David L. Morgan and Brent T. Sampson. The table lists over 180 tractor models tested from 1983 till the end of 1991. Tractors are divided into power groups of 20 hp. Both pto and drawbar tests and their fuel consumption data are reported. Drawbar test results are given in 2-WD and 4-WD mode whenever tested that way. Results are given at rated engine speed and at maximum power. Cost of the publication is \$2.00 plus mailing cost. (Dr. Louis I. Leviticus, Nebraska Tractor Test Laboratory, University of Nebraska, East Campus, Lincoln, Neb. 68583-0832 ph 402 472-2442)

About 5 years ago I wanted to put electric controls on my New Idea 323 corn picker. So Ifound two Delco-Remy windshield wiper motors and mounted one on the conveyor clutch and one on the corn deflector on the elevator. All I had to do was put a small crank arm on each motor, and then mount a box on the seat of the tractor with two pushbutton switches to operate them. I fitted the control box with a trailer connector so I can easily unhook the wires from the tractor. The control box also has a switch to operate a light that shines into the wagon. (*Phillip Pittroff, Rt. 1, Box 89, Martvile, N.Y. 13111 ph 315 626-6271*)

While trying to grease a difficult-to-reach Ujoint on an articulated tractor, I got an idea for a way to make greasing easier. The Ujoint was located in a rather small housing with little room to work around it. I shopped around but couldn't find a suitable coupler to reach if so I decided to make my own. The idea didn't work until I added a 360° swivel at the base of the hose to eliminate kinking and twisting of the hose. Then it worked so well it made all greasing easier. It's like having a grease coupler on the end of your index finger.

Most existing flex couplers have tried to add flexibility at the coupler end of the hose, resulting in a coupler too bulky to get into tight spaces. They also often require two hands to adjust the angle, which is frustrating in tight quarters. After several months of perfecting it, I decided to test market the coupler in my local area. After purchasers had used it for a couple months I did a survey and found 100 percent satisfaction with



everyone who had used it. Repeat orders have been strong. People like the fact it'll grease at virtually any angle, for instance when a U-joint stops at an awkward angle, or to lube ball joints and tie rods without removing wheels.

We sell an 18-in. hose with the new angled joint on one end and the swivel at the other (\$21.95). Designed to fit any hand grease gun. We also sell the patent-pending hose together with a Pistolmatic grease gun (\$44.95). (Roy J. Kangas, ABE Supply, Rt. 2, Box 595, Dodgeville, Mich. 49921 ph 906 482-3161)

We weld short lengths of 3/8-in. or larger chain into the corners of our loader buckets to help dislodge sticky dirt (and manure). Movement of the chains is enough to clear out the bucket without any shoveling or



scraping. We first tried the idea on our backhoe bucket since we do a lot of ditch digging. We put 8 to 10 links of chain on each side, welding the first and last link of each chain into the corners of the bucket. Works great. We got the idea from a local dealer.

We also discovered a way to fix old steel rakes or hoes with broken handles. We simply weld a piece of old water pipe to what remains of the handle and then slip a piece of plastic water pipe over this and bolt it at the base. Makes a good strong handle that's easier on the hands. (Bill & Kathy Earley, 13027 Smith-Goshen Rd., Beloit, Ohio 44609 ph 216 537-4568)



We're sending along a few photos of projects our tire recycling company has gotten involved in since we launched operations a couple years ago after reading ideas for recycling tires in FARM SHOW.

One of the most exciting ideas we've had is using tire treads to build a driveway roadbed. We completely covered the roadbed with steel-belted treads and then covered the treads with apple rock. The photo shows the driveway when it was halfway finished. Another photo shows the way we use rubber chips as a safety cushion around swing sets. This installation was done at a local elementary school. Much safer and cleaner than pea gravel or sand. We also use chips to make walkways. Much cheaper than concrete sidewalks.



A third photo shows a shear cutter we built for cutting tires in half - steel belts, beads, and all. We spent less than \$2,000 using steel parts and hydraulics we found at local



salvage yards. The self-contained unit's wide blade slices through car and truck tires in seconds. (James E. Jones, Lifelong Tire Recycling, 3030 SE 41st, Paris, Texas 75460)

We've started a new on-farm sideline business manufacturing and selling barn window sashes out of recycled plastic. My



husband Andy got the idea because he was tired of replacing rotted-out wood sashes that would only last a few years. He figured other farmers must have the same problem. (We also make windows for garages, warehouses, and home storm windows.)

These no-maintenance windows are made out of high-density plastic recycled from plastic bottles and milk jugs. It mills just like dimension lumber so we can custombuild windows to almost any size or configuration. Broken panes are easy to replace since the crossbars pull right off. Under independent testing we discovered that in the equivalent of 50 years aging, the plastic "wood" lost less than 1 percent coloration so we feel they'll last virtually "forever".

Our windows sell for about double the cost of conventional, inexpensive wood sashes. For example, a 9 by 12 window that you could buy for about \$16 at a discount lumber store sells for \$33 when made out of plastic. We've also made feedbunks and other livestock equipment out of the plastic. (Andy & Sue Ballou, Recycled Products, 231 S. Cedar St., Monticello, Iowa 52310 ph 319 465-6125)

I made this "air blast" sprayer using the fan from an old orchard sprayer. It mounts on the back of my field sprayer and runs off the field sprayer pto drive. I made the frame out of I-beam, channel iron and tube steel and used swivel wheels from an old David Bradley hay rake. It's fitted with an 8-roller pump, pto-driven by #50 roller chain so that it runs at 1,000 rpm's and produces 200 psi. The pto shaft runs under the tank and axle. The fan is driven by #80 sprockets and chain. Lattach the sprayer to the back of my field sprayer with two pins.

I've used the machine 4 years with little servicing other than oiling the chains. It works as well as any commercial air blast sprayer on the market. I built it so I wouldn't



have the maintenance of two separate sprayers and it cost just \$300. I use the same valves to control the air blast sprayer as I use to control the spray booms. The 200 gal. tank lets me treat 4 acres of vegetables on one fill. To disconnect, I just remove the two pins and unhook the hoses. (Enos Burkholder, Rt. 2, Box 2060, Fleetwood, Penn. 19522 ph 215 944-7475)

As door prizes for our FFA meetings, we give members a magazine subscription of their choice. We're sending along the order form for Brian Wiskus, winner of this month's prize. Please bill our chapter for this subscription. (Alan Carlson, FFA Advisor, Western Dubuque FFA Chapter, Epworth, Iowa 52045)



This heavy-duty carrier rack for Deere 50, 55 and 60 Series tractors is convenient for hauling tool boxes, extra seed, rocks, etc. It's also a handy platform to stand on for washing cab windows. It'll withstand the jarring impact of rough field work and the open grate design lets dirt and mud fall through. Attaches to existing holes in tractor frame. Sells for \$127.50. (Ken Walton, Walton Mfg. & Rebuilding, Inc., Rt. 4, Box 113, Delphi, Ind. 46923 ph 317 564-2990)



I made this 2-rake hitch to pull a pair of sidedelivery rakes 2 years ago and it works well. Lets you fold the back rake in and out on the go and it tracks so well that when you turn around you don't leave a loop in the hay windrow.

It consists of an L-shaped tongue, made out of angle iron and tube steel, that pulls the rear rake and attaches to a hinged frame mounted on the back of the front rake. A single hydraulic cylinder moves the tongue in and out, shifting the rake from transport to field position. (Harlen L. Grovom, Rt. 1, Box 224, Park River, N.Dak. 58270 ph 701 284-6528)

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