



To avoid harvest bottlenecks, Mark Petzoldt uses this semi trailer as a dump pit.



"Smart" auger system has a double hopper that matches unloading doors under semi box. Auger transfers grain from trailer to bins.

Semi Dump Box And "Smart Auger" Stop Harvest Bottleneck

Keeping ahead of ever-bigger combines is a constant challenge for many farmers.

"Grain dumping has always been our biggest bottleneck," says Mark Petzoldt, who harvests crops with a neighbor. "We bought a larger grain cart, but then the augers and bin spreaders couldn't keep up."

Their solution was to use a semi trailer as a dump pit. A "smart" auger system with a double hopper that matches unloading doors under the semi box slowly feeds grain from

the big trailer into bins.

The grain cart driver hauls his 900-bushel load to the semi trailer. With the 17-in. dia. auger on the grain cart, unloading is fast.

While grain goes into the trailer fast, it feeds out slowly, controlled by a proximity switch inside the semi box that starts the hopper augers and an auger that transfers grain to the bins.

As the box empties out, the switch is uncovered and the auger shuts off until the next

load is dumped in the trailer. "With one person on the combine and the other on the grain cart, we can shell out 15,000-20,000 bushels per day," says Petzoldt.

He built the twin hoppers out of sheet metal and connected them with a 5-in. grain auger. An 8-in. auger runs from the hopper unit to the grain transport auger that moves the grain into the bin. An old 90 degree gear box ties the two augers together.

"I put a second proximity switch near the discharge point where the hopper discharges into the transport auger," says Petzoldt. "If the transport auger isn't taking the grain away fast enough, grain will build up and cover

the switch, and the hopper augers will shut off so grain doesn't run onto the ground."

To make the hopper/auger unit easy to move, he welded swivel wheels from an old cultivator under the hoppers. The wheels under the discharge auger and hopper swivel, while the wheels under the first hopper are welded in place. This allows Petzoldt to steer it into place when setting up. When it is time to move to the next set of bins, he simply picks it up with a front-end loader and carries it down the road.

Contact: FARM SHOW Followup, Mark Petzoldt, RR 3, Box 31, Marshall, Mo. 65340 (ph 660 886-5970).



Concrete "groover" lets you make grooves in a freshly poured concrete floor to provide better footing for livestock.

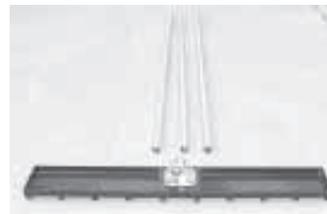
Simple "Groover" Lets You Slip-Proof Concrete Floors

Want to make grooves in a freshly poured concrete floor to provide better footing for your livestock? Instead of hiring a contractor, you can do the job yourself with this new concrete "groover" invented by an Idaho dairy contractor.

Made from 14-ga. metal, the groover measures 40 in. long by 6 in. wide and is designed to accept a 6-ft. long aluminum handle. It weighs only 12 lbs. A series of steel pegs welded onto the underside of the device make grooves 5/8 in. deep and spaced 4 1/2 in. apart. You run it like you would any type of Bull float, Fresno, or any handled concrete float.

The unit comes with a base bracket that accepts an adapter into which you mount the handle. Two different types of adapters are available - one for thread-on handles, and the other for snap-on handles. If you need a longer handle you just screw on an extension.

"It saves you money, and it makes grooves that will last a lifetime," says inventor Russ Dial of Firth, Idaho, a dairy and feedlot building contractor. "I came up with the idea because I needed something to groove the con-



"Groover" measures 40 in. long by 6 in. wide and is designed to accept a 6-ft. long aluminum handle. Extensions can be added to handle.

crete while it was still wet so the farmer wouldn't have to come back later on and have the concrete grooved by a contractor using a saw. Customers started asking me where I got it, and when I told them that I made it they asked me if I would make one for them," says Dial.

Sell for \$79 including S&H. When ordering please state which adapter you want.

Contact: FARM SHOW Followup, Russ Dial, RDCCO, 704 N. Hwy. 91, Firth, Idaho 83236 (ph 208 346-6502; fax 208 346-6221; email: rdcco@msn.com).

Safety Adapter For Extension Ladders

"It lets you safely use an extension ladder against a tree, pole, or other uneven surface," says Bernard Nahlen about his new safety device that slips over the top rails of extension ladders.

The patented unit consists of a 3/4-in. wide spring metal strap with a box-shaped bracket at each end. The two brackets simply slip over the ladder rails, anywhere down to the ladder's top rung. When the ladder is placed against a pole or tree, the middle part of the spring strap bends around it.

"It keeps the ladder from sliding and possibly falling when placed against any surface," says Nahlen. "The band will conform to any shape, including building corners. If you want you can screw the band down for extra safety. The metal has a breaking strength of more than 1,300 lbs. per square inch, so it will support even the heaviest person."

Nahlen says he can custom make the safety adapter to any size ladder. "All I need are the ladder dimensions," he says. He's looking for



Safety device consists of a spring metal strap with a box-shaped bracket at each end that slips over top rails of extension ladder.

a manufacturer, but for now he makes the units himself. They sell for \$14.95 unpainted; \$17.95 painted.

Contact: FARM SHOW Followup, Bernard F. Nahlen, 1255 Pasado Road, Marysville, Calif. 95901 (ph 530 743-8516).

Beans, Clover Double-Cropped Into Wheat

Double-cropping soybeans after wheat isn't a new idea. But Russell Myers takes that idea one step farther - he inter-plants not only soybeans into wheat, but also clover.

"It has several advantages," says Myers, of Battle Creek, Mich. "If beans mature before the first killing frost, I can harvest them as a cash crop. If they don't mature, I can still harvest a hay crop that has both clover and soybeans in it. Either way, I get additional income. And, because both soybeans and clover are legumes, they provide 'free' nitrogen for corn grown the following year."

The process begins in the spring when Myers mixes clover seed with urea, which is then broadcast onto the growing wheat crop. As soon as the wheat is harvested, he uses a no-till drill to plant soybeans into the wheat stubble and clover. The beans then grow up through the clover.

"It's a low-cost, almost foolproof way to add income and reduce soil erosion at the

same time," says Myers. "If the beans mature, I can usually count on a net income of \$60 to \$90 per acre. But if by mid-September it looks like the beans aren't going to mature, I harvest the soybean and clover combination as a high quality, protein-rich forage crop that can be fed to livestock."

Another advantage, says Myers, is that the clover acts as a natural weed control, so he doesn't have to spend money on soybean herbicides. As a result, he can use less expensive non-Roundup Ready seed varieties, which lowers his input costs.

Myers also figures he saves \$15 to \$20 per acre in nitrogen input costs on corn grown the following year, because of the extra nitrogen provided by the combination of soybeans and clover.

Contact: FARM SHOW Followup, Russell C. Myers, 9577 B Drive North, Battle Creek, Mich. 49014 (ph 269 979-3780).