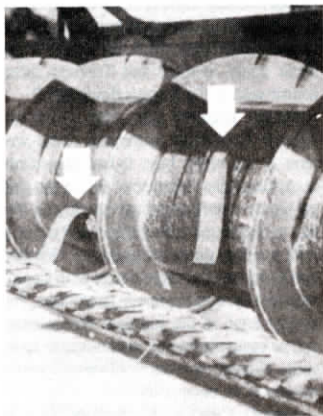


## "Grain Grabbers" Improve Crop Flow Into Combine

While harvesting a short wheat crop, Mike Heer, who farms near Ephrata, Wash., got an idea to improve crop flow into his combine's grain head. His "grain grabbers" consist simply of 12-in. long rubber strips that fasten to the feeder auger.

"I was watching the short stalks get cut off at the sickle and then just sit there until there was enough buildup to push them into the auger flighting which would then move it to the feederhouse. I knew that if I could just get the wheat to the flighting, it would feed more evenly so I fastened some rubber strips to the auger about 24 in. from each end, making them long enough to slap at the wheat on the cutterbar, pulling it in," says Heer.

He cuts the rubber strips out of inner tubes, making them 3 in. wide and 12 to 13 in. long. He holds them in place with a 3-in. long piece of flat iron or angle iron bolted in place with 1/4-in. bolts. He drills and taps the auger tube to accept the bolts. Strips bolt between sections of flighting, with each



strip 7 in. offset from the strip next to it.

Contact: FARM SHOW Followup, Mike Heer, Ephrata, Wash. 98823 (ph 509 754-4098).

Reprinted from *Barnes Farm & Shop Magazine*

## "Till-Drilling" Catches On Fast

Six years ago Dennis Bollig, Fenton, Iowa, came up with a new technique for seeding soybeans that he calls "till-drilling" and last year he put in 2,300 acres of beans using his method. He has also convinced about 50 other farmers to switch away from their conventional grain drills and planters.

Bollig's system consists of a 40-ft. DMI Tiger-Mate field cultivator on 6-in. spacings. It's pulled ahead of a Concord air seeder to loosen soil. The seeder holds 200 bu. of soybeans - or six tons of dry fertilizer for corn planting.

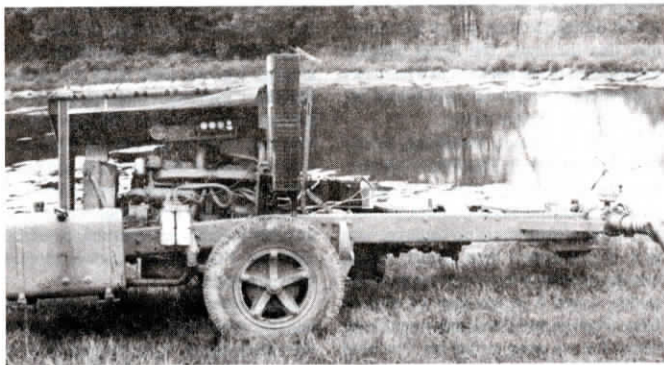
Bollig says till-drilled beans consistently outyield rowed beans and do at least as well as any other drilled beans. He plants at 225,000 plants per acre into chopped cornstalks. He seeds slightly deeper than a drill

at 2 1/2 in. but doesn't pack with press wheels.

Compared to conventional tillage, till-drilling eliminates several trips over the field and a lot of extra equipment. And in comparison to no-till, using a field cultivator reduces the need for pre-plant herbicides. It also leaves 30 to 60 percent of residue on the surface, depending on field speed. Bollig generally tills at 4 to 8 mph.

Bollig, who works as a part-time consultant for Concord, says DMI introduced a commercial Till-Drill last winter.

Contact: FARM SHOW Followup, DMI, Inc., P.O. Box 65, Goodfield, Ill. 61742 (ph 309 965-2233). (Excerpted from *USAgriculture*)



## Fuel-Saving Irrigation Engine

Pennsylvania farmer David Hoover used an old Mack truck engine coupled to a 5-speed transmission to cut fuel consumption to as low as 1.2 gal. per hour when pumping irrigation water.

"I had been using a Deutz DX 160 tractor or an IH 856 tractor but they burned 2 or more gal. per hour. It also tied up a tractor and we had to keep changing tractors depending on what field chore we were doing," says Hoover.

The 237 Mack engine and transmission came from a junked garbage truck. He remounted the engine on the stripped-down truck frame carried by a 2-wheel axle so he can tow it around the farm as needed to

pump out of creeks. The pump, positioned at the back of the trailer, is driven by a pto shaft that runs through a transfer case he got from an old army truck. "We had to use a transfer case to reverse the pto shaft because it turned the wrong direction coming out of the truck transmission. There are universal joints on the end of every shaft. I never would have thought it would run as smoothly as it does," says Hoover.

Fuel tanks mount on both sides of the tongue. The irrigation pump mounts on a frame welded to the back of the frame. A tin roof is held up above the engine by steel uprights.

Murphy safety switches automatically

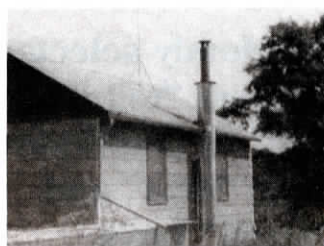
## "Never Corrodes" Home-Built Chimney

"We think it's far safer than the stainless steel chimneys on the market for wood-burning stoves," says Albert Smith, Wykoff, Minn., who made his own chimney which he says shows "no sign of wear after 10 years of use".

Smith's original chimney was brick but he had a lot of creosote build-up and had to keep rebuilding or re-tuckpointing it. Finally, he decided to make his own chimney out of heavy-walled (3/16-in. thick) 8-in. dia. steel pipe.

"It was much cheaper than a commercial chimney and has virtually no creosote build-up even after 10 years of heavy use. I bought the pipe from a steel supplier," says Smith.

He surrounded the pipe with 6 in. of fiberglass insulation - to prevent condensa-



tion inside the pipe - and covered that with valley tin.

"It's ugly but it was cheap and we've never had to clean it. Makes for no-worry wood burning," says Smith.

Contact: FARM SHOW Followup, Albert Smith, Rt. 1, Box 141, Wykoff, Minn. 55990 (ph 507 362-5863).

## Handrail Makes Gravity Box Safer

"While putting wooden extensions on a new gravity box, my 5-year-old nephew was playing inside the box and having a good time climbing and sliding around. That's when I got the idea of putting a handrail inside above the door to make it safer," says Art Thomas, Stryker, Ohio.

"The rail is about 5 ft. above the bottom of the door. I used 1/2-in. dia. rod and welded two small pieces of angle iron on either end of the rod and bolted them to 2 by 4's holding the sides to the box. The rail is about as long as the box so it can be reached from anywhere along that side of the box."

Contact: FARM SHOW Followup, Art Thomas, 08219RD 21, Stryker, Ohio 43557 (ph 419 682-2667).



## Fake Birth Fools Reluctant Ewes

Staging a fake birth may fool reluctant ewes into fully accepting "orphaned" lambs, according to Duane Keisler at the University of Missouri.

Keisler places inflated balloons into the vaginas of ewes who give birth to twins but refuse to accept their second lambs. When he does it within 48 hrs. of the real birth, the ewe goes back into labor, laying down and beginning abdominal contractions again.

After a few minutes, you can deflate the balloon and present her with the orphaned lamb.

Mothers accept the lambs as their own 80 percent of the time, allowing it to suckle. You then bring back the first lamb and she will mother both. That 80 percent success rate compares to just 8 percent of ewes who accept second lambs if they have rejected a second lamb after a previous birth.

## Easy Way To Bend PVC Pipe

A FARM SHOW editor heard on the radio about a new way to bend PVC pipe but didn't get much information other than the idea itself.

According to the report, construction workers who needed to bend pipe tried many ways to heat the pipe and then bend it, but they always ended up causing distortion

in the pipe. Finally, they got the idea of heating the pipe from the inside out by slipping it over the end of a truck exhaust pipe. In a few minutes, the pipe was "limp as a noodle". At that point, they simply laid it out in the shape they needed and waited for it to cool off.

## Edible Cover For Bunk Silos

A South Dakota farmer has come up with a tasty new way to cover high moisture corn in bunk silos.

Burton Raymer of Bradley, has stopped using plastic, rope and tires to keep the corn in his bunker silos under cover. Instead, he now uses an edible cover of chopped forage sorghum spread 6 to 8 in. deep over his high-moisture corn. He says the chopped forage forms a crust over the top and won't blow away. As a bonus, cattle can eat the crusty cover.