## Self-Cleaning Chain Link Conveyor

Ted Friesen, of Oakley, Kan., was having trouble with leaves, mud and other trash balling up and plugging the link belt conveyors on his beet topping equipment. He solved the problem with a patented cleanout device that works on beet toppers, potato diggers and any other machine that uses a conveyor link belt.

Friesen rigged up a rubber flap that replaces all but the sprocket ends of several of the spaced parallel links. The flap is hinged on two of the links so that it rides rigidly on the upper train to carry away tops and trash. But, when the endless belt returns on the lower train, the flap drops down to release any trash that's accumulated before it can plug the conveyor. The flap automatically flips back into place when the belt returns to the upper train.

"We have used this attachment for harvesting and topping beets for several years now and have found it highly satisfactory in ridding the machine of



trash," Friesen told FARM SHOW. "That helps cut downtime and prevents repair expenses."

Friesen says any width conveyor with any link diameter can be adapted. He's custombuilding the attachment in his farm shop now, but is also interested in locating a manufacturer to take it over. Friesen says most adaptations can be completed for under \$100.

For more information, contact: FARM SHOW Followup, Ted Friesen, P.O. Box 668, Oakley, Kan. 67748 (ph 913 672-3747).

## "Hybrid" Grain Drill

Jerry Kruger, of Warren, Minn., wasn't satisfied with the depth control and seed placement of his air seeder but liked its transportability. He was having transport problems with his Deere 9300 grain drill, but liked its accuracy. So he decided to combine the accuracy of the drills and the easy transportability of the air seeder into one "hybrid" machine.

We bought three used 100 model IH grain drills for about \$2,800. We removed the seed and fertilizer boxes and drives, leaving only the frame, openers and press wheels. Then, we built a 39-ft. frame and hitch which allowed us to 'wing up' the two outside 12-ft. drills on the 14-ft, center drill. Lift assist wheels on the rear of the center drill raise the press wheels off the ground during road transport. Front wheels of the center drill were moved out and replaced with a heavy duty castor wheel for more strength and stability in the transport position. Seed and fertilizer is metered and delivered to the double disc openers with the same system of hoses and manifolds that were previously used with the air seeder and cultivator," explains Kruger.

To test the new planter, he pitted it against his John Deere drills by seeding half his small grain acreage with one machine and half with the other.

"We couldn't see any difference in stand or emergence and



all the crops look good," says Kruger. "We're happy with the convenience of filling this unit. We fill it with 100 bu. of wheat and an equal amount of fertilizer. With this we can seed 50 acres of wheat or barley without stopping. And, unlike the drill transport, this drill folds quickly for road transport between our farms."

The wings fold up with two 4 by 30 in. hydraulic cylinders. Jerry says he has separate hydraulics for the markers, transport wheels, and wings.

Total cost of the drill, not counting three weeks labor, was about \$8,000. Kruger says that's "less than the cost of a good drill transport system".

Kruger notes that International Harvester engineers have been out to photograph his seeder and he's heard rumors that several air seeder companies plan to come out with a similar machine in the future.

For more information, contact: FARM SHOW Followup, Kruger Farms, Rt. 1, Warren, Minn. 56762 (ph 218 745-5646, or 437-8435).



Some of the best new products we hear about are "made it myself" innovations born in farmers' workshops. If you've got a new invention or favorite gadget you're proud of, we'd like to hear about it. Send along a photo or two, and a description of what it is and how it works. Is it being manufactured commercially? If so, where can interested farmers buy it? Are you looking for manufacturers, dealers or distributors?

Harold M. Johnson, Editor

## "Fresh Air" Furnace Vent

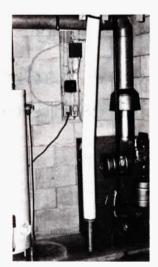
Alice and Robert Tupper, of Canton, S. Dak., are saving energy with a simple "fresh air" vent for their furnace and water heater.

"The house is tighter and there are fewer drafts around windows and doors since the furnace draws fresh outside air in through the air vent, rather than pulling it from the rest of the house," says Robert.

To make the vent, the Tuppers simply ran a 4-in. flexible dryer vent hose into the house and down near the floor close by their furnace. The flap door on the dryer vent, which had to be removed to allow air in, was replaced with wire mesh to keep out rodents and birds. Cost of the vent was only \$10.

Fresh outside air flows freely through the vent and to the furnace room floor. Even in the coldest weather, cold outside air is sucked into the furnace without cooling the rest of the house, the Tuppers point out.

A representative of the Minnesota Energy Agency told FARM SHOW that the idea of a fresh air vent is a good one if the furnace and water heater are in a semi-blocked-off area. If they are in the open, he says it will be difficult to contain the cooler air where needed. Under those cir-



cumstances, you should duct the vent right into the burning chamber, he suggests. The energy representative noted that this type of vent is now required in building codes for most of the country as homes are built tighter to prevent energy loss. He says it improves combustion so gases burn completely, and insures that noxious gases flow out of the house. Done right, he says you can expect to save as much as 4% on your heat and hot water bill.