

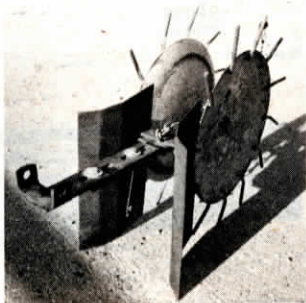
Made It Myself

(Continued from previous page)

"Deflector Plates" Protect Corn On Windy Days

"I can cultivate on windy days without damaging corn leaves," says Iowa farmer Sidney Jiskoot, of Sanborn, about his home-built cultivator deflector plates that mount in front of his cultivator's rolling shields.

The adjustable curved metal plates, 7 in. wide and 14 in. high, direct corn leaves through the rolling shields to keep the shields' fingers from catching the leaves. The plates are bolted to a 1-in. wide, 14-in. long horseshoe-shaped bracket that bolts to the rolling shield's mounting tongue.



"The problem is that on windy days, the fingers on the rolling shields tend to pull the leaves down to the ground and then the cultivator shovels throw dirt on them," explains Jiskoot, who built the patented deflector plates four years ago. "After dirt is deposited on the leaves, the corn plant hangs crooked and can even die. The deflector plates keep the leaves inside the rolling shields, away from the fingers."

Jiskoot, who practices minimum tillage, says trash won't plug up inside the deflector plates because they clear the

ground by several inches. "Rocks aren't a problem either because the shields usually ride over them."

The deflector plates can be moved forward or backward by changing the position of the mounting bolts. Slots in the plates allow them to be moved up or down depending on corn height.

Jiskoot is looking for a manufacturer. Contact: FARM SHOW Followup, Sidney Jiskoot, Rt. 1, Sanborn, Iowa 51248 (ph 712 757-4609).

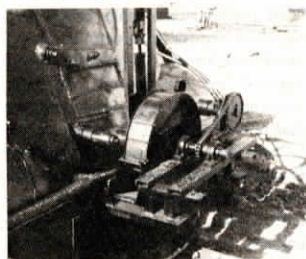


"Fuel Tanker" Slurry Spreader

"Performance has been excellent. It throws manure out in an even 25-ft. wide pattern. Total cost, including the tanker, was just \$850," says Bruce M. Klemm, Whitelaw, Wis., who built his own 4,000-gal. liquid manure spreader tank out of a "junked" fuel tanker.

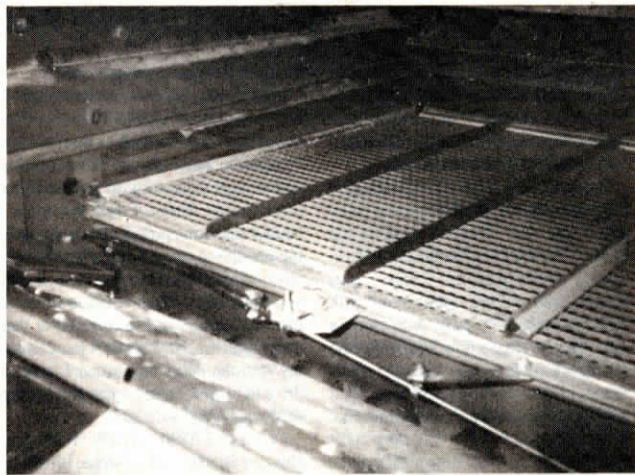
The first step in converting the tanker to handle manure was to cut open all of the baffled compartments inside the tank so manure can flow freely to fill the entire tanker. Then he cut a 36 by 36-in. hole in the top of the tanker at the rear and welded 12-in. high sides around the opening to form a fill hopper.

At the rear, Klemm made his own "slurry slinger" out of a blower from an old International Harvester grinder mixer. "I welded a short piece of 6-in. dia. well casing horizontally into the lower rear end of the tanker. I made a hydraulic gate valve out of plate steel and an 8-in. stroke



cylinder. It controls the flow of slurry to the slinger assembly which consists of the blower chain-driven by a 250 rpm hydraulic motor," says Klemm, noting that the motor is geared up 2:1 with sprockets to drive the blower at 500 rpm's.

Contact: FARM SHOW Followup, Bruce M. Klemm, 9008 Meier Rd., Whitelaw, Wis. 54247 (ph 414 732-4592).



He Improved Combine Performance With "Junk" Parts

Bill Kreitzer, Elliott, Ill., used a little ingenuity and "junk parts" to make three inexpensive modifications that boost the productivity of his Deere 7700 combine.

Kreitzer uses electric seat adjustment motors from junked-out cars to adjust the combine sieve and chaffer on-the-go; a \$20 bicycle tachometer to monitor combine fan and header speed; and a safety switch from a riding lawn mower to monitor the grain level in the combine's tank.



Kreitzer first purchased two car seat motors from a local junkyard. He fastened the motors to the outside wall of the combine's cleaning chamber. He ran a length of hydraulic hose from the first motor to the chaffer adjustment lever and from the second motor to the sieve lever. Kreitzer notes that he uses hydraulic hose because it's stiff enough to act as a flexible adjustment shaft. The next step was to fasten two switches for the motors to the top of his Dickey-John grain loss monitor in the cab. He then removed the Dickey-John grain loss sensor from the straw walker and reinstalled it below the sieve, converting the grain loss monitor into a tailings return monitor.

"The straw walker monitor showed me how much grain was going over the straw walker but it couldn't help me control grain loss," says Kreitzer. "By repositioning the sensor below the sieve, I now know how much grain is going into the tailings return auger. If too much grain is being returned I can open up the sieve using the switch in the cab. I no longer have to get out of the cab and practically stand on my head to see how much grain is in the tailings return auger. This system is perfect for blending soybean varieties in different parts of the field to achieve an optimum average moisture content. Some varieties have higher moisture contents and bigger seed sizes than others. I now can adjust the sieve down and harvest soybeans in another part of the field without getting out of the cab to readjust the sieve. And if there's too much foreign material in the grain, I can open up the chaffer using the other switch in the cab."

Kreitzer estimates he spent about \$100 to wire up the two servo motors.

A bicycle tachometer purchased for \$20 from a local bicycle dealer lets Kreitzer monitor both fan and header speed. He added a two-way switch to the tachometer and mounted it in the cab. He then mounted a magnetic sensor on the fan blades and another one on a pulley on the feederhouse shaft that drives the combine's header. The tachometer measures the number of fan and feederhouse shaft revolutions. "By flipping the switch one way I can read fan speed and by flipping it the other way I can read header speed," notes Kreitzer.

His third invention is a grain tank shut-off. Kreitzer does at least 30% of his combining at night when it's difficult to see how much grain is in the tank. The problem was compounded when he added a 14-in. high extension which allows grain to completely cover the tank window. To solve the problem, he removed a 1/2-in. wide by 10-in. long safety switch from under the seat of a Deere 318 riding lawn mower (the switch is used to start and stop the mower when the driver gets on and off), bolted it to a 2-in. wide by 6-in. long plastic paddle, and mounted it near the top of the tank.

"Grain pushing against the plastic paddle turns on a light mounted on the cab's steering post column to alert me that the hopper is full. The light automatically shuts off when I unload the tank."

Contact: FARM SHOW Followup, Bill Kreitzer, P.O. Box 1, Elliott, Ill. 60933 (ph 217 784-4646).