operation more. I chose the Challenger over a 4-WD wheel tractor because of compaction problems and stability on our steep hills, which have 40 to 45° slopes. Operator comfort and visibility is excellent. Most maintenance can be done from the ground and most everything else can be reached from the walkway around the machine."

"It drives better than my pickup, handles better than my car and uses less fuel than a 300 hp. 4-WD while pulling the same load. I don't see how you could improve it," says Ed Frost, Winchester, Ill., pleased with the Challenger he bought in April,1987. It now has 1,100 hrs. on it. "You don't need a ladder to change filters or to wash windows and all parts of the tractor are easy to reach. I'm still amazed at how quiet the cab is and how clean it stays. People that go for a ride in the Challenger can hardly believe that the tractor is pulling as heavy a load as it is. On the highway it's as quiet as a car. We bought the tractor because of its ability to pull a heavy drawbar load in our heavy river bottom type of wet soils on less fuel per acre than a 4-WD. We pull a 54-ft. field cultivator, a 20-ft. mounted grain drill, and a deep ripper working 22 to 26 in. deep. We're especially impressed with the lack of visible tracks behind the grain drill as seen from infra-red aerial photos. I have pulled a scraper with it and was pleased with its ability but I wouldn't use it with a dozer blade. It was primarily designed and built for a drawbar load and is not balanced to push a blade, although it would have the power."

Roger D. Daniel, LaCrosse, Wash., has put 325 hrs. on a Challenger leased in December, 1987. "To make this tractor work Caterpillar had to increase the tension on the track belts but in doing so there's

"It has more power than 4-WD tractors of similar horsepower."

more pressure on the front idler tires which actually causes the bead to break loose on the bogie wheel rim. They're working on the problem. Also, the cab air cleaner filter compartment could be made a little handier. Overall, however, we're happy because it tears up our ground much less than the wheel tractor we had before even though that tractor had crab steering. There's less greasing needed and the engine hood does not need to be raised for routine service. The Challenger gives us the best of both worlds between a steel track crawler tractor and a wheeled tractor. It stays on steep hills like a crawler yet has the speed and roadability of a wheeled tractor. It has more usable power than a 4-WD tractor of a similar horsepower rating because of less slippage. We use it for everything from primary tillage of wheat and barley stubble to finishing of summer fallow preparation."

"I'm generally satisfied but it rides rougher than my other crawler tractor and quite a bit of dust comes inside the cab. Dealer service has been unsatisfactory. The Challenger was delivered with two oil reservoirs low and fan belts were loose. I have an oil pressure problem at this time. I notified the dealer 2 months ago and they have never been out. The tractor has more power than my D-6C Cat, and similar traction. It's a shame one dealer has a monopoly on all Caterpillar products in this area," says Arnold Van Hollebeke, Pasco, Wash., who's put 590 hrs. on the Challenger he bought in the spring of 1988.

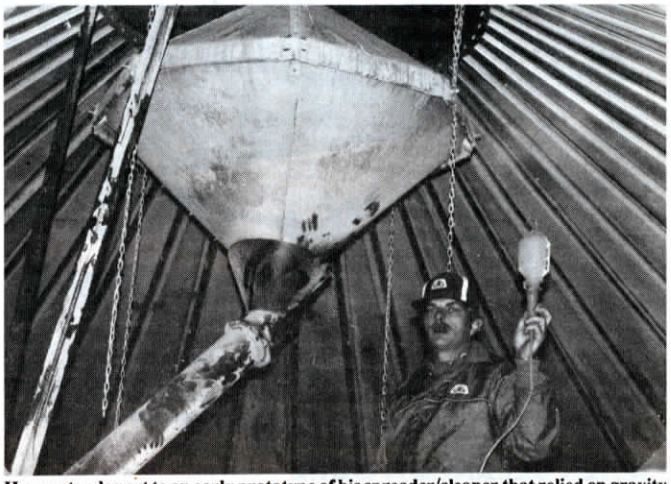
"We bought a Caterpillar Challenger because we had too much down time with our Deere 4-WD's and we liked the looks of the rubber tracks and the good reputation of Caterpillar. We've had little down time and good fuel economy. It could use a better fuel gauge and open center hydraulics. We use it for in-field ditching and, although it won't dig like a steel track, you can move faster so it'll still do a lot of work. It rides much more smoothly than a steel track," says James Johnson, Warren, Minn., about the Challenger he bought in June, 1988. It has 1,380 hrs. on it.

"I wish the steering detent were less severe. The monitor gauges can't be seen when the sun shines in the cab. The cab is sealed tight so it's quiet. An air-ride seat would be much better than the seat they use. We had some problems the company plans to fix this winter. The left track came off and I had some trouble with the right track. The company told me tracks came off on at least four other Challengers, mostly when doing heavy scraper work. It works great on a 12-yard scraper, much better than a big 4-WD. We especially like this tractor because it causes less compaction in the spring. We pull a 48-ft. field cultivator and a 27-ft. disk with it," says James Braun, Wheaton, Minn., who bought his Challenger in the fall of 1987.

Larry Steckline, Garden Plain, Kan., bought his Challenger 1 1/2 years ago and now has about 700 hours on it. "I increased my acreage and wanted a bigger tractor to get more work done. I'm very satisfied. The Challenger has about the same horsepower as the 4-WD tractor I had been using but has considerably more pulling power and far less slippage. I use it with a 12-bottom moldboard plow, 35-ft. offset disk and 60-ft. cultivator. I'll add another bottom to the plow and buy a bigger 45-ft. disk. The Challenger handles well and is easy to service. The company researched this tractor well. We've used conventional Caterpillar dozers but compared to them the Challenger has a quieter and more comfortable cab."

"It's solved our soil compaction problem," says A.G. Crane, Larned, Kan., who bought a Challenger last March and has already put 1,000 hours on it. "We use it for all types of primary and secondary tillage. The Challenger outperforms a 4-WD tractor of similar horsepower. It has the same traction and flotation but better speed and maneuverability. We've talked to the company about the need for a row-crop Challenger."

Robert Caylor, Ottawa, Kan., says he bought his Challenger to reduce soil compaction on his bottom land. "After using the Challenger the soil works better and the planter does a better job. The Challenger does 20 to 25% more work than our 4-WD Steiger, which also has 270 hp., because of reduced slippage and better weight distribution. We use it to make two passes across the field. On the first pass we pull a large field cultivator, and on the second pass we pull a smaller field cultivator and planter. The hired help complained that it rides rough but I don't think it rides nearly as rough as the Steiger. We also use the Challenger and a spreader equipped with flotation tires to custom spread lime in muddy ground where a 4-WD tractor couldn't go."



Hoppe stands next to an early prototype of his spreader/cleaner that relied on gravity to clean grain. A pipe at the bottom of the unit carried fines and dirt away.

AUTOMATICALLY CLEANS GRAIN AS YOU AUGER IT INTO BIN

First-Of-Its-Kind In-Bin Spreader/Cleaner

You've never seen anything like the new combination "spreader-cleaner" invented by Gerald Hoppe, St. Clair, Minn., that mounts in the top of any grain bin and both cleans and spreads grain as it's augered into the bin.

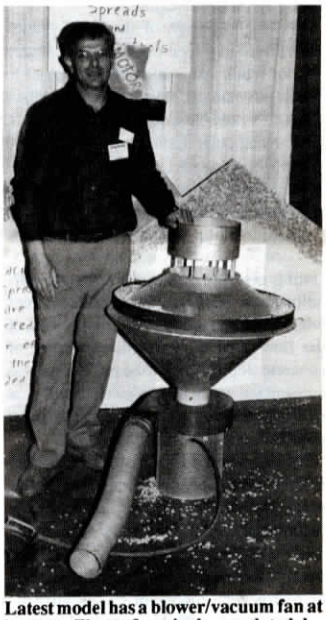
"It has totally eliminated the need for conventional grain cleaners in my operation and does as good a job or better than any cleaner on the market thanks to its revolutionary vacuum design that sucks chaff, dirt and fines from grain as it enters the bin," Hoppe told FARM SHOW. "An added benefit is that it can be turned upside down inside the bin, once it's filled with grain, to aerate grain at the top of the bin, sucking out hot air from the peak and blowing it outside the bin."

The new spreader-cleaner consists of a cone-shaped screen positioned above a fan powered by a 1 hp electric motor. A vertical cylinder above the screen fits inside the bin opening with the spreader-cleaner below it. Grain is augered into the cylinder and then down across the cone-shaped screen. Chaff, fines, insects and bees' wings are sucked down through the screen by the fan which blows them outside the bin where they can be loaded into a truck or trailer.

"As far as I know, this is the first grain cleaner that uses vacuum power. It's a great improvement over gravity screens. In addition to working as well or better than any other cleaner on the market, it has no belts, pulleys, gears or flighting so maintenance is minimal. The fan is the only moving part."

Hoppe, who has tested the cleaner extensively on his own farm, got the idea for the new unit while trying to find room for a grain cleaner at his bin site. "My bins are arranged in a circle with a dryer and auger in the middle. As a result, there was no space to put a grain cleaner. I decided to design a machine that would do two jobs at once on top of my bins."

When used upside down, the spreader-cleaner eliminates hot air and moisture migration in the peak which prevents crusting and allows corn to "breathe", greatly reducing spoilage, says Hoppe. "My system produces more suction per square inch at the peak than a bin floor aeration system. The two systems complement each other and could be used at the same time."



Latest model has a blower/vacuum fan at bottom. Flow of grain is regulated by cylindrical "gate" at top of unit. Flow of grain must be constant over entire spreader to maintain maximum suction power (narrow metal ring on top of screen is there for demonstration purposes only)

Hoppe says the new spreader-cleaner doesn't have to be used inside the top of a bin. It can also be positioned on the end of an auger for loading into trucks or flat storage.

Hoppe says the spreader-vacuum cleaner can be transferred from bin to bin. "However, I'd like to keep the price down so farmers could afford to have one unit in each bin. I'm currently looking for a manufacturer for this patented invention."

For more information, contact: FARM SHOW Followup, Gerald Hoppe, Box 157, St. Clair, Minn. 56080 (ph 507 245-3454).