## "Cadillac" Portable Grain Cleaner

By Frank J. Buchman

There isn't one like it anywhere.

Most farmers can say that about something they've built using their own ideas and labor, but the portable grain cleaning unit recently completed and put to use by Don Phillips of Hope, Kan., fits that description to the ultimate.

"It has over 2,500 man hours of labor involved in construction and that doesn't include the nights' sleep I lost thinking about and designing it in the last two year period," says Phillips. He had four or five part time assistants on the project and describes the unit as the "Cadillac" of portable grain cleaners.

"It's a new style cleaner with all electronic digital gauges and there are two flows instead of one like most cleaners, so it does a better job," he notes. And 500 bushels can be cleaned in an hour.

But the most unique aspect of the portable unit and the part of it that "really makes it shine," according to the designer and builder, is the gravity seed sorting table.

Explaining that the gravitiy table will up test weight of seed, increase quality and improve appearance, Phillips says, "Wheat to be cleaned for seed could weigh 60 pounds coming into the cleaner, up to 61 pounds out of the cleaner and weigh 62 pounds after it leaves the gravity table.

"This can pay for the seed alone. Every point higher seed test weight increases yield a half to two bushels," added Phillips.

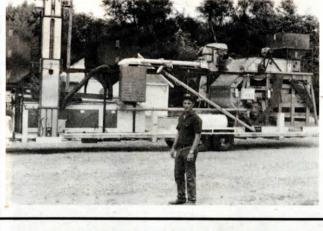
to two bushels," added Phillips.
The cleaner and the gravity table were both purchased new from the Clipper company in Georgia, but the gravity table is actually the first one of its kind made by the firm, according to Phillips.

Powered by a generator, the plant, "takes 64 horses to run the unit" which has 15 individual motors, says Phillips, who admits that some of the control mechanisms were a "nightmare."

While wheat cleaning has been the first concern, Phillips also plans to clean soybeans, oats and alfalfa. "A stoner can be installed to clean beans for edible purposes if we'd decide to do that," the maker says.

Contact: FARM SHOW Followup, Dan Phillips, Hope, Kan.

Story and photo reprinted from Grass & Grain, Box 1009, Manhattan, Kan. 66502.







## Gooseneck Drill Teamed With Howard Rotaspike

"We seeded over 1,000 acres with this rig last year with no problem," says Martin Wedman, Valleyview, Alberta, who put a ball-hitch on his Howard Retaspike tillage machine and hitched it up to a heavy-duty gooseneck hitch that's mounted on his trailing grain drill. The combination of the two machines lets him prepare a seedbed, incorporate chemicals and seed at the same time.

Wedman had to remove the up-front castor wheel on the grain drill and beef up the frame. The gooseneck hitch attaches to the seed drill frame at four points.

"We follow directly behind the plow. This year we had hardly any rain for the first 6 weeks of the growing season and still got a good-looking crop due to the smooth field left by the Rotaspike," says Wedman.

A spray boom, mounted on the Rotaspike, is equipped with 4 wide angle nozzles. Twin spray tanks mount on the front of the IH 3588 tractor. Chemicals are sprayed just ahead of the Rotaspike which uses its shaft-mounted tiller spikes to incorporate the chemicals as it prepares the seedbed.

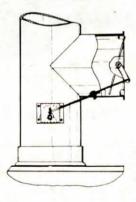
Contact: FARM SHOW Followup, Martin Wedman, P.O. Box 1889, Valleyview, Alberta, Canada TOH 3NO (ph 403 524-2553).

## "Flue Flow" Regulator

An overheated wood stove scared Fred Bucheit, Beech Creek, Penn., into the development of an automatic "flue flow" regulator that automatically maintains a proper air flow into the burning chamber by monitoring flue temperatures.

The regulator replaces a conventional barometric unit that's designed to let room air into the flue when the pressure inside decreases due to high temperatures. Bucheit says the barometric units often don't work fast enough so that by the time they open up there's already a problem. His device makes use of an automotive choke coil mounted in place of the barometric sensing unit and connected to the flapper by a rod linkage.

"As temperature increases in the flue, the choke coil opens up instantly, opening the flapper and letting air down into the stove, stabilizing the fire and preventing overheating. As the flue cools down, it'll instantly shut down," says Bucheit,



noting that an easy adjust dial on the choke coil makes it a simple matter to adjust the temperature of the stove.

"Maintaining a more consistent burn also helps reduce creosote buildup in the chimney," says Bucheit, who's looking for a manufacturer for his patented device.

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## Solar Cattle Waterer

"Before I built this solar cattle waterer, the calves were getting a meal of mud everytime they went for milk because I couldn't keep the cows out of the waterhole." says Martin Wedman, Valleyview, Alberta.

The solar waterer's powered by a tractor battery that's kept at full charge with a 3-amp solar panel. The battery runs a 12-volt bilge pump protected inside  $V_{0}$ -in. hardware cloth screen and floating under a sealed up 5-gal. plastic pail that floats on the surface of the pond A light rope is tied to the pail to pull it to the side when needed.

Contact: FARM SHOW Followup, Martin Wedman, P.O. Box 1889, Valleyview, Alberta TOH 3NO (ph 403 524-2553).