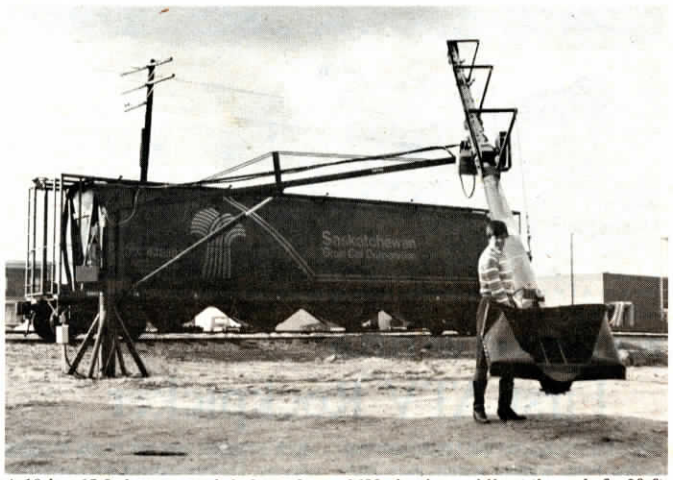

A 10-in., 65-ft. long auger is balanced on a 360° pivoting saddle at the end of a 20-ft. swing arm.

THEY SELF-LOAD 100 TO 150 CARS PER YEAR WITH 'HYDRA-SWING' AUGER SYSTEM

Rail Car Loading System

Eight farmers near Chancellor, Alberta, have teamed up to purchase a "Hydra-Swing" auger system that lets them load their own railroad cars with wheat, barley and canola - and save $3 to $6 per ton over elevator charges

At the heart of the system is a 65 ft. long, 10 in. dia. auger. Driven by a 30 hp electric motor, it's balanced on a 360 degree pivoting saddle located at the end of a 20 ft. long swing arm. The arm also pivots 360 degrees at its center stanchion, which is bolted to a deeply embedded concrete base. A hydraulic cylinder raises and lowers the arm at the touch of a button.

A nearby shed contains controls for the auger and serves as an office. A load cell located under the auger saddle transmits weight to a computer and digital readout mounted in the office, and gives the weight of all grain moving through the auger to within 1% accuracy.

The system also includes a 3,300 bu. surge bin, holding slightly more than one carload of grain.

The eight farmers teamed up to save on elevator charges, which were running $6.25 to $9.25 per ton. They became partners with Palliser Grain, a company with lots of experience with producer loaded cars and which also has a grain license. Palliser negotiated the lease with the railroad and administers the shipments.

Since last September, over 40 cars have been shipped through the farmers' track loading system. They hope to self-load 100 to 150 cars per year.

"Canadian Pacific Railway 'spots' up to five cars at a time and we have 72 hours to fill them," explains group member Murray Christensen, Standard, Alberta. "We have to be able to fill the surge bins from trucks, to load cars directly from the surge bin and to load cars directly from trucks.

"Using an ordinary wheeled auger is just not convenient enough for the kind of tonnage we're loading. With this system, the only manual labor is picking up the end of the auger and swinging it into position. We don't have to wrestle with augers as we move them from car to car or compartment to compartment."

From storage, the farmers can fill a car in less than an hour. They can unload a truck in 5 or 6 minutes.

"The surge bin is filled only when we're cramped for time," notes Christensen. "For example, if one farmer needs to load three cars in 72 hours, he won't have enough time if he lives some distance from the track. Filling the surge bin buys him time."

A 500 watt sodium high pressure flood light is located so that cars can be loaded at night.

Cost of the Chancellor system, fully installed - including all electrical work, with all the options and including the surge bin - was $53,000. "Farmers can start a system for as little as $4,700 by buying the swing arm and mounting their own auger on it," says Ellwood Sawby, owner of Skyway Grain Systems, which designed and installed the system.

For more information, contact: FARM SHOW Followup, Skyway Grain Systems, Inc., Box 3414, Airdrie, Alb., Canada T4B 2B6 (ph 403 948-7810).

An ordinary wheeled auger would not be convenient for the large amount of tonnage being shipped by the farmers.

Mensen built a high-ceilinged 18 by 20-ft. shop at the center of the quonset and fitted it with bi-fold doors.

ROOM TO MOVE BIG MACHINERY IN AND OUT

Bifold Door Puts New Life Into Old Quonset

"With the large bifold door it may look like an airplane hangar. But, for working on large machinery, you can't beat it," says Larry Mensen, Manchester, Iowa, about the slick workshop he built into an old Quonset hut.

The bifold door, which measures 14 x 16 ft., allows the shop to accommodate today's larger equipment. Mensen built the door by hinging two 7 x 16 ft. garage doors together.

The Quonset hut, built in 1940, measures 24 ft. wide, 40 ft. long and 8 ft. high. Originally, it had two 12 x 8 ft. sliding doors in the center. Mensen replaced them with the shop.

"When my dad built the Quonset, it worked great for pulling in his W-D tractor with a 3-bottom plow. But the doors were too small for me to bring in anything wider than a small tractor or wagon. And the roof was too low for bringing in a combine or tractor with a cab," says Mensen.

The shop measures 20 ft. wide and 18 ft. high in front, with the roof, built from 2 x 6 in. beams covered with corrugated steel, sloping down toward the Quonset's roof. It's big enough that Mensen can bring in any of his implements and move them anywhere within the Quonset. He can also get most of his combine into the new shop. A beam hoist lets him work on any equipment.

To build the shop, Mensen used a cutting torch to remove a 20-ft. wide section of the Quonset's wall, cutting halfway back into the roof. Then he set 4 x 6 in. steel poles, 18 ft. high, into the ground as a frame for the shop.

To support the shop's roof, he laid a 6 in. beam perpendicular to, and over, the Quonset's roof beams. To support the shop's bifold door, he installed a header, made of three 2 x 12 in. beams with 1/8 in. plate between them, across the top of the poles.

To build the bifold door, Mensen set the two 7 x 16 ft. garage doors inside an angle iron frame. The doors are bolted together and hinged in the middle. Mensen opens them by turning a crank in 1 corner of the shed.

Use of scrap materials - used steel, posts and garage doors - held construction costs below $1,000, says Mensen. He picked up 18 x 20 ft. sections of corrugated galvanized steel from a neighbor whose shed roof had blown away. The sides were still in good shape.

But Mensen isn't through with the shop yet. "I plan to add a solar panel in front which will provide hot water to heat the floor."

Contact: FARM SHOW Followup, Larry Mensen, Rt. 2, Manchester, Iowa 52057 (ph 319 927-2618).

Magnetic Caps For Outlets

Keeping dirt out of hydraulic outlets is easy with new magnetic caps which store out of the way when not in use unlike conventional caps that hang below the outlet and gather dirt.

Mike Farney, Perryton, Texas, says his rubber-coated "Magna Caps" contain strong high grade ceramic magnets that never lose their power. The caps are 1/2 in. thick and 2 in. in dia. They're designed to self-center over outlet for an airtight fit. When not in use you can stick them to a fender or other clean flat surface.

"Conventional outlet plugs get dirty and crack so that after a few years they're difficult or even impossible to use. The chance of getting dirt into the hydraulic system - and doing expensive damage to the system - is high," says Farney.

Two sizes of caps fit all outlets. The

regular size fits nearly all tractors with quick couplers. A larger size fits all larger Deere tractors with a steel coupler carrier. They sell for $8 apiece.

For more information, contact: FARM SHOW Followup, Mike Farney, Magna Cap, 710 N. Main, Perryton, Tex. 79070 (ph 806 435-3560).