



Up-front bale forks load bales onto inclined bed of carrier. They slide to the back by gravity.

## STACKS AND FEEDS 4 BALES AT ONCE

# Big Bale Stacker, Feeder

"This machine will load and stack 300 to 400 big square bales a day and then feed them out individually at a rate of 6 or more per hour. There's never been another machine like it," says inventor-manufacturer Charles Siebenga, Belgrade, Mont., about the big square bale stacker-feeder he designed and now builds.



The "Bale Manager" stacks bales 4-high.

of the bale, or you can feed it out in widely spaced "flakes".

The stacker-retriever requires only a minimum 60 hp. tractor. "It lets one man take care of all the handling of big bales - loading, stacking, retrieving, and feeding. No other machine does it so well and in such an uncomplicated way," says Siebenga, who is also the inventor of a new-style square baler (Vol. 11, No. 4) that he originally developed for Vermeer Mfg. The baler is now being evaluated by a European manufacturer.

The 4-bale stacker, loader and retriever sells for \$15,000. Equipped with the add-on bale feeder mechanism, it sells for \$20,000.

For more information, contact: FARM SHOW Followup, Charles Siebenga, P.A.D. Enterprises, 211 8th St., #2, Belgrade, Mont. 59714 (ph 406 388-7681).

As a loader, stacker and retriever, Siebenga's "Bale Manager" is equipped with two up-front forks. To load a bale in the field - traveling at speeds of up to 8 mph - the trailer hitch is first switched to the offset position. The teeth slip under the bale and then are raised to load the bale onto the main bed of the machine where it slides by gravity to the back. The first three bales load onto the trailer bed and the fourth is held by the forks. Once loaded, the trailer can be switched in-line behind the tractor for over-the-road transport. Bales are unloaded by simply raising the bed to a vertical position, and then raising the loader teeth off the top bale.

Four 2 by 30-in. cylinders raise and lower the main bed of the machine. Two 3 by 20 in. cylinders control the loader teeth. In less than two hours the Bale Manager can be converted to a retriever-feeder by mounting a bale feeder-roller assembly on the front of the machine and replacing the bale forks with gripper arms. The machine simply retrieves a stack of four bales, and feeds them into the up-front bale feeder by tipping up the back of the main bed platform so the bales slide forward one at a time.

Rate of feed of the bales can be controlled so that you can feed the bale out evenly in small amounts by "chewing" it off the end



Bale feeding mechanism is mounted in place of bale-loading forks at the front of the Bale Manager to feed bales out to livestock.



Hopper killer consists of a 2 by 12-ft. metal grid that mounts on a tractor front-end loader.

## REQUIRES ONLY THE POWER IN A TRACTOR BATTERY

# New Killer Grid Zaps "Hoppers" With Volts

"It's the best way to kill grasshoppers," says inventor James F. Chaney, Airdrie, Alberta, about his electric "hopper zapper" that uses electricity from a tractor electrical system to electrify a steel grasshopper-killing grid mounted on a tractor front-end loader.

The hopper killing grid consists of a 2 by 12-ft. rectangular metal frame made from 2-in. thin-wall square tubing. The electrified steel gridwork is fastened to the frame with a series of insulators. The prototype unit was attached to the bucket of a front-end loader, along with the electrical components that electrify the grid.

"Power is taken from the battery of the tractor and boosted by electrical components to provide enough voltage and current to instantly zap grasshoppers and other insects. It's draws so little power that the only cost of operating the unit is fuel to

operate the tractor. The only maintenance of the unit itself is to keep the gridwork clean," says Chaney.

To operate you simply run the unit close to the ground through roadways, ditches, headlands and "grasshopper strips" left between fields.

"It kills grasshoppers instantly and the dead insects can be eaten by birds and other livestock without danger, unlike grasshoppers killed with insecticides. It can be used in and around livestock, unlike some insecticides which require relocation of animals for application," says Chaney, who plans to continue testing on farms this summer. He's looking for a manufacturer.

For more information, contact: FARM SHOW Followup, James F. Chaney, P.O. Box 5023, Airdrie, Alberta T4B 2B2 Canada (ph 403 948-3303).



Pto-driven semi-truck grain hauler has air brakes that are activated by air compressed with an old air conditioning compressor that mounts on the trailer tongue and is driven by the trailer's transmission.

## Pto-Driven Grain Hauler

A pair of Minnesota farmers haul grain in a big way with their farm-to-market semi-truck grain hauler that uses pto power to transport up to 1,100 bu. of grain over even the softest ground. The big rig was built by combining a junked hopper bottom trailer with the rear chassis from a tandem axle cement truck.

Ray and Larry Rauenhorst, who farm near Olivia, Minn., put the trailer together with salvaged truck parts. The heart of the rig is a tandem truck axle that makes up the tow hitch and fifth-wheel mount for the big hopper-bottom semi-trailer. The truck axle assembly is equipped with a Ford truck

transmission. It's pto-driven and is only used when the trailer is being moved out of a field onto the road, or when in soft ground in the field. The trailer requires a 90 to 140-hp. tractor. The Rauenhorsts say they can travel over soft ground with the big powered trailer that a tractor and conventional grain wagon couldn't handle.

The Rauenhorsts bought the junked hopper-bottom trailer, which had been involved in a rollover accident, for \$1,200. They used hydraulic jacks and welders to straighten it out.

Contact: FARM SHOW Followup, Ray Rauenhorst, Olivia, Minn. 56277.