

"Punch" applicator tines inject liquids 5 in. deep into the soil, spaced 8 in. apart.

"POINT INJECTION" GETS LIQUID OR ANHYDROUS IN FAST, EASY

Rolling Spoke Wheel "Punches" in Fertilizer

Iowa State University researchers were surrounded by crowds trying to get a look at their new-concept "point injection" fertilizer wheel at the recent Farm Progress Show in Marion, Iowa.

Point injection of liquid fertilizers and anhydrous ammonia is designed to save energy, soil and fertilizer. It lets you make multiple applications of fertilizer throughout the growing season with less damage to roots and requires less fuel and horsepower than knife-type applicators, according to the researchers. Also, for conservation tillage, point injection incorporates less trash and crop residue into the ground.

The injector wheel is about 24 in. in dia. and has 10 spokes, each 9/16 in. in dia. The applicator is capable of injecting liquids 5 in. deep into the soil about every 8 in. A rotary valve in the hub dispenses liquid to the "down" spike. When used with fertilizer solutions and suspended solutions, a positive displacement

pump is needed.

Richard Vandepol, Iowa State University researcher, says the design lets you do much more work with less horsepower. "We can mount 15 wheels on a toolbar behind a 67 hp. tractor and apply fertilizer at 5 mph or more. Because of the design, you can apply fertilizers at more than one time during the growing season without damaging crops."

Vandepol says anhydrous tanks have enough pressure to prevent plugging of the down spoke as the anhydrous is injected. The wheels themselves are ground driven. He notes that the point injector could also be used to apply anhydrous to pastures and forages.

Several companies have shown an interest in marketing the point injector.

For more information, contact: FARM SHOW Followup, J.L. Baker, Agricultural Engineering Dept., Iowa State University, Ames, Iowa 50011.

This Invention's Perfectly Haul-Right

By Cathie Shaffer

When Ohio farmers Dan Reitzel and his father Willis, of Perryburg, hop into their truck to haul grain to the elevator, they expect a nice, pleasant ride.

And a lot of funny looks. They know people are going to stare at them and ask questions.

After all, nobody's ever seen a truck quite like theirs before.

That's because they don't hook their hopper-bottom gravity wagon behind their truck.

They carry it on their truck.

And it was all Dan's idea.

"We had an 18-foot trailer, but we had trouble dumping," he explains, "and I figured there just had to be an easier way.

"So I started thinking about it, and decided the best thing to do was to mount a gravity box on the truck itself."

Using materials on hand, he replaced the bed of a 1965 straight truck

ALSO HAULS FEED, HAY

Many Uses For Dead Sow Cart

"A dead sow cart is expensive if you only need it once or twice a year. Consequently, we designed ours so it's versatile enough to use every day," says Grace Mosdal, co-owner of Mosdal Feed Carts, Broadview, Mont., manufacturer of the new "Three-In-One Dead Sow Cart".

Besides using the cart for hauling out dead hogs, the optional steel flat deck and box make it a handy tool for carrying any type of heavy load, whether it be hay, oil barrels, motors or feed bags.

Featuring an undercarriage with four rollers, the cart has fenders and two small rollers over each tire, making it easy to pull a large dead sow onto the cart using a winch attached to the front.

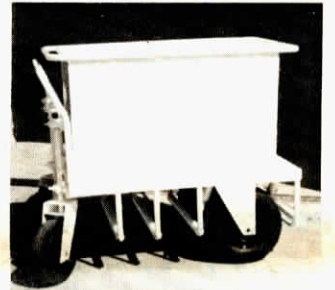
A flat deck attaches to the top of the cart framework so you can carry other cargo. In turn, a box (22 in. deep and the width and depth of the undercarriage) fastens on top of the flat deck for transferring baby pigs, hauling bulk feed and other chores. Mosdal notes that a box 24 by 36 in. would hold about 20 baby pigs and about 320 lbs. of bulk feed. If desired, side extensions for added capacity, or a divider to keep litters separate, can be added.

Each cart is custom made to your specifications. A standard undercarriage, 22-30 in. wide and 36-52 in. long, sells for right at \$445. With a matching flatdeck and box, the price is \$545.

For more information, contact: FARM SHOW Followup, Mosdal

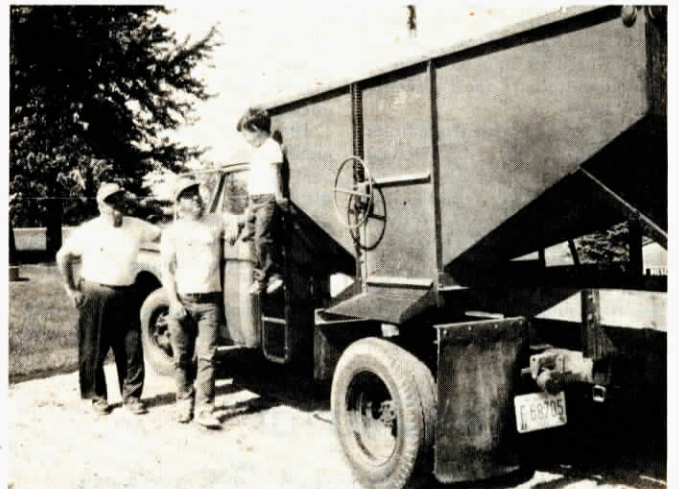


Rollers make it easy to slide animal onto the dead sow cart.



A flat deck and box mounts on the cart for carrying baby pigs, hauling feed, and doing other chores.

Feed Carts, Broadview, Mont. 59015 (ph 406 667-4468).



Reitzel mounted a 130 bu. hopper-bottom wagon on a 1965 straight truck.

with the box from a gravity wagon.

The box holds 130 bu. and there's usually a wagon hitched on behind when the elevator trips are made. It's a quick and efficient way to haul grain, the men have discovered.

"We finished it just in time for wheat harvest last fall, he explained. "A lot of neighbors have looked it

over and asked questions. Several have told me they'd like to do the same thing."

Dan says the truck is easy to maneuver, and that it can be used to unload onto the conveyor on the farm, something they couldn't do before.

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