Ice cream maker is belt-driven by the gearbox off an old bin sweep auger, which is attached to tractor pto.

Pto-Powered Ice Cream Maker

Lee Horst wanted to make ice cream the old fashioned way, by using an ice cream maker on a cart powered by a hit and miss engine. However, he couldn't justify the cost so he bought a 5-gal. ice cream maker and mounted it on back of his restored John Deere M tractor. The gearbox off an old bin sweep auger is used to belt-drive the unit from the tractor's pto.

"I take it to family gatherings and church picnics, where ice cream is always welcome. People really get a kick out of watching it operate," says Horst. "After all, they say a balanced diet just means having an ice cream cone in each hand."

He built a hinged wooden platform that rests on the tractor drawbar and goes up under the transmission gear case to provide support. "I thought about using the tractor's side pulley to operate the ice cream maker, but it ran too fast," says Horst. "I already had a junked-out bin sweep auger so I removed the gearbox and had a neighbor build a mounting bracket for it. Then I attached the gearbox to the pto. It runs at a fast idle, which is just what I needed to make ice cream."

He made a jackshaft with bearings and pulleys to get the right speed, mounting everything on the left side of the ice cream maker so the paddles inside the canister would turn in the right direction.

"With the hinged platform, I can take the drive belt off and dump the ice out of the canister after we're done making ice cream," says Horst. "I mounted a stand on the back of the platform to help carry the weight of the unit. When I want to use the tractor for something else, I just take the gearbox off the pto and lift the platform off the tractor."

Contact: FARM SHOW Followup, Lee Horst, 1605 Goldenville Rd., Gettysburg, Penn. 17325 (ph 717 677-8564).

Virtual Farm Tours For Older Adults

Cows, chickens, pigs, and miniature donkeys were the stars of a virtual Minnesota farm tour that older adults and their caregivers enjoyed watching in May.

The events are free and were a welcome distraction during stay-at-home orders due to Covid-19. They were organized by Lutheran Social Service of Minnesota Caregiver Support and Respite Services after Laura Rasmussen, Regional Coordinator, saw a news story about a woman playing her violin outside of a residence for seniors.

"I thought we could do that online and create something for our caregiver and respite program," she says. "We work to provide opportunities for relief and support for our caregivers to keep individuals in their homes as long as possible."

Since volunteers couldn't physically visit homes to give caregivers a break, LSS turned to technology. "Guests" are invited to "attend" through a secure online platform. That means caregivers can take a break while the older adult is busy with the virtual event. Or, the caregiver can relax and enjoy the event too.

The hour-long tour on LSS employee Judi Weiss' Park Rapids farm was extremely popular, Rasmussen says. Many participants grew up on farms, and seeing the animals and hearing Weiss talk about farm challenges brought back childhood memories.

The organization provides iPads for qualifying clients and encourages them to stay connected with others through technology.

Rasmussen planned to offer the weekly sessions throughout the stay-at-home order and then hopefully continue them monthly through the year - especially in winter when most adults and their caretakers are isolated at home.

Photo courtesy of Judi Weiss

Last May older adults and their caregivers enjoyed watching a virtual Minnesota farm tour, organized by Lutheran Social Service of Minnesota.

Rasmussen is also available to answer questions about how Minnesotans can participate in the LSS Caregiver Program that offers in-home and group respite, coaching, consultation, technology support, education and emergency care planning for caregivers.

Contact: FARM SHOW Followup, Laura Rasmussen, 3101 S. Frontage Rd., Suite 100, Moorhead, Minn. 56560 (ph 866 787-9802; www.lssmn.org; Laura.Rasmussen@lssmn.org; Facebook: LSS Caregiver Support).

V-8 Cub Cadet Garden Tractor

Matt Brand, Bay City, Wis., replaced the original 1-cyl., 7 hp. engine on his 1961 Cub Cadet garden tractor with an American Motors 304 cu. in., V-8 carbureted engine.

The tractor is equipped with dual wheels on back and big rear fenders. The radiator and grill on front are off a Farmall Cub tractor.

"I built it mainly as a conversation piece. The big engine came out of an old Jeep and was a very tight fit," says Brand. "I got the tractor from a friend. I had to do a lot of tape measure work. I built the frame and pieced it together from there."

The tractor already had dual wheels when Brand got it. He made a small extension on front to hold the radiator and grill. He also had to move the gas tank back under the frame and move the battery back behind the tractor's rear end.

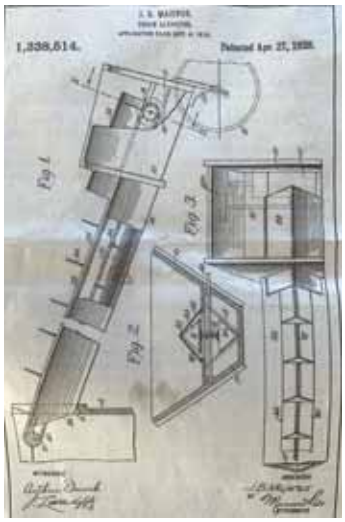
The engine extended too high to put the original hood back on, but Brand says he plans to make a new hood to accommodate the engine.

The tractor still has the original 3-speed transmission, although Brand adapted a belt drive to make it work. "I had machining done to adapt the original belt pulley system to the Jeep's flywheel. A cable runs from the carburetor to the original hand throttle.

Matt Brand replaced the original 1-cyl., 7 hp. engine on his 1961 Cub Cadet with a V-8 carbureted engine out of an old Jeep. "I built it mainly as a conversation piece," he says.

"I plan to section the hood out around the air cleaner to get it to fit. The hood will flip up from both sides, much like the hood on old Ford Model T cars. I've never seen a Cub tractor equipped with a bifold butterfly hood like the one I plan to install," says Brand.

Contact: FARM SHOW Followup, Matt Brand, W5372 County Rd. V, Bay City, Wis. 54723 (ph 715 410-0490).



In 1918 Minnesota farmer J.B. Majerus patented the first elevator designed to move small grains. He built the elevators up until the late 1930's, when newer and taller granaries became popular.

Grain Elevator Design Marks 100 Years

More than 100 years ago a Minnesota farmer, whose family and in-laws had immigrated from Luxembourg to the U.S., invented and patented the first elevator designed to move small grains. According to local newspaper accounts and the inventor's grandson, the device built by J.B. Majerus was a real worksaver because it used mechanical power to replace shovels, pails, sacks and manpower.

Records show that Majerus submitted his idea for patent in 1918 and received approval in 1920. Majerus used half of a blacksmith shop in Bellechester, Minn. to build his elevators while his son Richard used the other half to sell gas and repair automobiles. Majerus built his elevators in 24, 26, 28, 30 and 32-ft. lengths. The body of the hopper and the elevator platform were made from 20-ft. long boards and painted green and red. His blacksmith shop made some of the gears, chain and wheels and the business purchased other parts. He used a stencil to paint the brand name on back of the hopper.

Majerus and his sons marketed the elevator in much the same way equipment is marketed today. They towed some full sized models to county fairs in southeast Minnesota and built a 6-ft. long demonstration model for towing to locations further away. They took orders from interested customers and built them at Bellechester during the winter. In the spring, disassembled models were put on a trailer and delivered to nearby customers while other units were sent by rail to customers in the Dakotas and Montana.

Over the years Majerus had companies offer to buy his business and invention, but instead he chose to keep production in the tiny Goodhue County village so his sons and others had work. Production carried on there until the late 1930's, when newer and taller granaries exceeded the engineering limitations of the Majerus models. Smaller farms continued using the Majerus elevator and even 40 years later, in 1976, a Millville, Minn. farmer operated one. Over the years 8 other patent applications for grain elevators have cited the Majerus design, one as recent as 2011.

A booklet about the historical grain elevator invention was recently donated to the Goodhue County Historical Society by J.B.'s grandson Doug Majerus.