"One person on an ATV with the Stone Collector can do the work of three picking stones by hand. says Kristensen. "Lighter than a tractor and loader, vou can collect stones in wetter conditions or even after a field has been sown.'



Pull-Behind ATV Rock Picker

Clearing rock from fields is more fun and less work with the Stone Collector from Danish start-up firm Stoneless. Hook an ATV to the trailer-mounted Stone Collector, swing it into its offset position, and start collecting rocks. The tightly placed shovel plates will pick up rocks as small as 2 1/2 in. on the surface or partially buried and penetrate nearly 6 in. into the soil.

"The shovel plates on the Stone Collector are 1/4-in. thick," says Søren Kristensen, Stoneless. "They have pointed teeth that can pry a stone out of the ground or dig away the dirt around it. If it's less than 19 1/2 in. in diameter, it's flipped through the throat and into the box. Larger stones can be carried off

The jaws that do the digging and the paddles that flip the collected stones are powered by a 5 1/2-hp. Honda motor and an

the field in the jaws."

independent hydraulic system. Jaws, paddles, and positioning of the cart are controlled by a multi-function joystick.

Once the cart is full, the operator swings it back behind the ATV and heads for a dumping site. The 5-ft., 9-in. wide and 8-ft., 10-in. long Stone Collector is easy to maneuver in the field and out.

"One person on an ATV with the Stone Collector can do the work of three picking stones by hand," says Kristensen. "Lighter than a tractor and loader, you can collect stones in wetter conditions or even after a field has been sown."

Clearing stones from fields by hand as a young farm boy gave Kristensen good reason to develop an alternative. After training as a blacksmith, he spent 5 years developing the Stone Collector. Early prototypes were put to use on his family farm. After 2 years of refining the design, he began to offer it

"We sold four in 2019 and within 2 years had sold more than 100 in Denmark and Sweden," says Kristensen. "Today we have

more than 300 units in use. Most are in European countries, but we have shipped one to Quebec."

Until recently, all sales have been direct from the company, many via the Stoneless website. The company is now actively looking for dealers.

Stone Collectors are fabricated and assembled in Denmark. The company offers a unique warranty.

"If any parts are needed, we'll cover their cost, including shipping, as well as any work that needs to be done at local machine shops," says Kristensen.

He trusts the heavy-duty machine will need minimal work. The galvanized steel is designed to stand up to the elements. Initial feedback from buyers led to reinforcing the cart and other parts where needed.

Kristensen recommends using a 500cc, 4 by 4 ATV or larger to pull the 925-lb. machine. The actual pull on the ATV averages only 175 lbs.

Price is around \$10,900 plus S&H.

Contact: FARM SHOW Followup, Stoneless, Søgade 26, 8600 Silkeborg, Denmark (ph 45 5357 1837; sales@stoneless. dk; www.stoneless.dk).

Hitch Connects PTO-Powered Implements Without Leaving Cab

"With all of the automation on farms today, it's incredible that you still have to climb down out of the cab to hook up PTOpowered equipment and hydraulic lines," says Romain Ribo, CEO of Tracto-Lock. "That can be impossible for people with disabilities or for people who don't have the necessary physical strength."

Ten years ago, this line of thinking lead Ribo to begin work on a system to connect a farm implement, hydraulic lines, and PTO without leaving the tractor cab.

After 2 years of field testing, the resulting Tracto-Lock will soon be available for commercial purchase.

A universal "male" configuration that fits with all makes and models mounts on a tractor, and a matching "female" version is attached to an implement.

"Whether you have a 60's tractor or a brand-new one, as long as it has a 3-point lift, our system can be installed," says Quentin Derouck, Tracto-Lock sales manager.

To make the necessary connections, a

multi-coupling system automatically connects the hydraulic lines while the matching elements of the PTO allow its connection without manual intervention.

Each unit weighs approximately 285 lbs. and can be easily removed in less than 5 min. by a single operator using a handling machine like a skid steer. While daily moving of a Tracto-Lock from implement to implement would be inefficient, moving it seasonally from ground tools to harvesting equipment limits the investment of multiple units.

There's a simply designed wired cabmounted remote control. "Our technology is quite low tech and just about mechanics, Derouck says. "We know the challenging environment on farms and that sensors, cameras or other technologies don't always work well."

Future capabilities are to make autonomous tractors truly autonomous by having them hitch to various implements without

The Tracto-Lock is manufactured near the



To make the necessary connections, a multicoupling system automatically connects the hydraulic lines while the matching elements of the PTO allow its connection without manual intervention.

company's headquarters in the southwest of France and is scheduled for a France-based marketing launch in 2024. The company hopes to deploy its equipment in the U.S. in 2025.

The projected cost of the Tracto-Lock components will depend on if the equipment requires a PTO or hydraulic connections, but

keyed, so the seats stay parallel to the ground. The fourth seat (driver's seat) is mounted to square stock that pivots at the main frame from vertical to horizontal position and also slides in and out

The main frame is 11 ft. long and 13 1/2 ft. wide. It's powered by a 7-hp. Briggs and Stratton engine. A large pulley on the engine drives a small pulley on the Wheel Horse transmission. A small pulley on the output of the transmission drives a large pulley on the small car's rear end.

"My grandpa installed a bike-style brake on the pulley on the engine," says Stears. "A hand clutch tensioned or detensioned the drive belt from the engine to the transmission. The throttle was mounted next to the hand

Einhorn retained master cylinders and brakes on each wheel. A lever to the left of the operator's seat could be flipped right or left to brake a wheel independently for sharp

"For slight adjustments, he steered it with foot pedals that connected to the single front caster wheel," says Stears.

A large platform to hold roots or spears, depending on the season, is mounted to the rear. Smaller platforms for baskets are mounted between each pair of seats.

Einhorn put many special touches on his tractor. In a nod to worker safety, exhaust was

to equip a tractor and an implement with both capabilities, the total price will be approximately \$10,000.

Contact: FARM SHOW Followup, Quentin Derouck, Tracto-Lock (ph +33603110970; Quentin.derouck@tractolock.com; www.tracto-lock.com).

piped vertically to a small muffler well above the workers' heads. Pipe-in-pipe mounted, worker footrests were easily adjusted by removing and reinstalling pins. Chains on the drive wheels ensured good traction, even in wet conditions.

When an uncle who inherited the tractor questioned its future, Stears offered to take it. A buyer and seller of (largely Oliver) tractor parts and tractor manuals, he had no plans to start raising asparagus.

"I salvage old tractors and farm equipment," says Stears. "I also collect and sell tractor manuals of any color. I have around 40 parts tractors with 20 Olivers in my personal collection."

After bringing the asparagus tractor back to his home farm, he put it up for sale. A nearby friend who wants to raise a few acres of asparagus offered him \$500.

"My grandfather always hoped it would go to another vegetable grower, but most asparagus growers are too big to want it," says Stears. "My buddy plans to use it, as well as clean it up to carry his family around tractor shows

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Main frame is 11 ft. long and 13 1/2 ft. wide. It's powered by a 7-hp. Briggs and Stratton engine. A large pulley on the engine drives a small pulley on the Wheel Horse

Self-Propelled Asparagus Tractor

When Thomas Stears posted a picture of his grandfather's homemade asparagus tractor on the Homemade Farm Equipment Facebook page, FARM SHOW had to get the story. The self-propelled asparagus do-all was made for planting and harvesting the high-value crop and was loaded with versatility.

"My grandfather Jack Einhorn was an engineer at Bendix and did everything just right," says Stears. "He had a small farm near Miles, Mich., where he raised his family. He built the rig sometime in the early 1970's. They grew about 10 acres of asparagus, and he had this for the family to ride on.

The frame is a combination of angle iron and square and round steel tubing. It has three seats in addition to the driver's seat. Seats to the left and right of the driver are mounted to round tubing that can slide in and out of slightly larger round tubing. Their tubing is