



Photo courtesy Town and Country

Fisher's tool combines up-front ripping blades with rotary drum that mixes underlying clay with surface sand.

## Land Reclamation Tool Invented By Farmer

An Australian farmer is putting the finishing touches on a new land reclamation tool that he says could add millions to the southeastern Australian economy and other countries around the world, including the U.S., Africa and the Middle East.

The "Claymate", invented by Noel Fisher of Frances, South Australia, combines up-front ripping blades with a rotary drum that mixes underlying clay with surface sand, changing the soil structure.

It's expected to allow the agricultural development of nearly 5 million acres of sandy, water repellent soils known as 'non-wetting sands' on 8,600 properties in Western Australia, Southern Australia and Western Victoria.

Here's why there's so much interest in Fisher's machine:

Conventional earthmoving equipment used to work up and remix such soils is expensive and requires 400 hp or bigger equipment to operate and several different machines must be used to complete the job.

The "Claymate" combines the operations of collecting, pulverizing, mixing and spreading the soils, and one application lasts for generations. It's fuel efficient and requires only a 150 hp tractor.

Fisher and a group of engineers, called Dryland Engineering Pty. Ltd., showed off their pre-production machine last summer at farm shows throughout southwestern Australia. (**Town and Country Magazine**)



Photo courtesy Farmers Weekly

Power cart is fitted with a 150 hp Cummins diesel that powers trailing equipment, eliminating need for a larger tractor.

## Tow-Behind Engine Boosts Pulling Power Of Tractor

Two British farmers increased the amount of tillage work they can do in one pass by building a tow-behind power cart they fitted with a 150 hp Cummins engine. They pull the pto-engaged power cart behind their 110 hp Case-IH Maxxum.

Michael and Dan Schwier, who farm 450 acres of mostly heavy clay soil, came up with the idea as a way to get their wheat and rapeseed planted in a timely manner. The Maxxum could not handle both a culti-packer and the large power harrow that they use.

They cannibalized a home-built Paraplow to hold the cart. A length of 18 by 10-in. thick-walled box tubing was used for the main frame, which is fitted with a nose section for hitching to the drawbar. The main frame doubles as a 13.6-gal. reserve fuel tank that tops the main fuel tank every time the cart is raised.

The main frame is fitted with two outriggers and axle trailing arms. Arms have

a bushed pivot at one end and Dynadrive transporter stub axles fitted with combine tires on the other.

Lift is provided by a pair of hydraulic cylinders with 2-ft. stroke mounted on one end of the top link framework and to the axle unit on the other.

The Schwiers used a gearbox out of an old Case-IH Axial Flow combine to reverse direction of the driveshaft. The gearbox mounts between the cart's chassis uprights.

"I run the motor at 1,700 rpm's," notes Michael Schwier.

The Maxxum tractor is fitted with duals so it can pull the rig on the Schwiers' steepest ground. Traveling 5 mph, the rig covers 4 to 5 acres per hour.

"For about \$9,000 it's really revolutionizing our drilling operation," Schwier says. "We've never been able to produce seedbeds like these before." (**Farmers Weekly**).

## Baler-Mounted Rake Wheels "Chop" Stalks

Iowa farmer Mark Paulsen found a way to bale corn stalks without having to chop them first by mounting 4-ft. high wheel rakes on front of his Vermeer 605 round baler.

The ground-driven rakes - two on each side - gather stalks, leaves and husks into a windrow that feeds directly into the baler.

"It saves a trip across the field," says Paulsen, who custom bales about 4,000 acres of corn stalks each year.

The four rake wheels mount on a 3-ft. long extension of the baler tongue. Paulsen also had to extend the pto shaft 3 ft. A pair of arms made from rectangular steel tubing extend outward at an angle from the tongue area, and two wheels U-bolt onto each arm. The rakes fold up hydraulically for transport via a single cylinder that operates off the tractor hydraulics. The cylinder has a sprocket welded onto the top of it that allows a length of roller chain to raise each arm.

"The rake wheels walk right through residue and comb it off the ground," says Paulsen. "The wheels break most of the stalks off, leaving stubble that's 4 to 5 inches high. If the stalks are dry it'll windrow up to 90 percent of the residue on the field. The rake wheels cover a total of five rows. I drive with the rear tractor tires on top of two rows which leaves a flat area to rake the stalks across. The faster I go, the more the wheels kick the material in toward the baler. I usually go about 8 to 9 mph in the field.

"I mounted it on my 1994 Vermeer baler two years ago. It worked so good that when I bought a new 1996 605K baler last year I immediately mounted a rake wheel attach-

ment on it, too.

"I bought the wheels new from an implement dealer and spent a total of about \$1,500 to \$2,000 to build the attachment. A neighbor with a new Deere round baler mounted a \$4,000 commercial stalk chopper on front of his baler, but after he saw my rake wheel attachment he took the chopper off and built an attachment like mine. He said the chopper had too many moving parts, pulled hard, and was dirty.

"I had been using a 15-ft. wide Loftness shredder that also windrows the stalks, but I didn't like it because it left the material too loose and chopped it up too much which made it hard to keep the bales together. It was like trying to make a round bale out of silage. My rake wheels leave longer stalks that wrap up tighter and allow the bale to keep its shape a lot better.

"The bales I make range from 3 to 6 ft. high. The smaller ones are generally used in hog buildings. I also contract with Harlan Great Lakes Chemical which shreds and pellets the bales and uses them to make plastic products.

"I also custom bale 4,000 to 5,000 bales of hay each year. By pulling a pin I can remove each outside wheel and run only one wheel on each side to tuck the hay in. Both outside wheels are mounted on telescoping arms that slide in much like a receiver hitch on a pickup."

Contact: FARM SHOW Followup, Mark Paulsen, 2712 Elm Lane, Elk Horn, Iowa 51531 (ph 712 764-5550).



Convert-A-Bed converts flatbed bale hauler to pickup or dump box, complete with everything including tailgate.

## Flatbed Bale Hauler Converts To Dump Box

Owners of flatbed bale haulers will want to take a look at this new add-on dump box that has all the features of a regular pickup box including tailgate.

The patent-pending Convert-A-Bed is built out of 12 ga. metal and features 8 to 12-in. high sides, says manufacturer Steve Pekarek, Bois D' Arc, Mo.

To install, you simply turn it upside down and slip your bale hauler's lift arms into the sides of it. It locks into place with a pin on each side. Mounting and dismounting take only seconds, says Pekarek.

Once installed you can use it as a regular pickup box or use it to dump up to 3,000 lbs. of cargo.

Available to fit virtually any flatbed bale hauler on the market.



Add-on box dumps as much as a 3,000-lb. payload.

Prices start at \$1,100.

Contact: FARM SHOW Followup, Convert-A-Bed Inc., Rt. 1, Box 295, Bois D' Arc, Mo. 65612 (ph 417 732-2489).