



Revolving steel wheel (6½ ft. dia.), equipped with 9 in. splitting blade, makes 40 revolutions per minute.

### CUTS TWO CORDS IN LESS THAN 3 HRS.

## “Instant Split” Big Wheel Log Splitter

Like many farm inventors, Hollis Orr built a machine last year that now sits idle most of the time behind his shop. The difference between Orr and other inventors of “idled ideas”, however, is that Orr’s idea is just too good to use all the time.

Orr, you see, built himself a wood splitter that’s so fast he can pull up to a pile of wood in the morning and split a year’s supply of fuel by the time the sun goes down. Since he doesn’t need any more wood than that, all his splitter does most of the time is draw questions from other would-be builders of this first-of-its-kind wood splitter.

“I got the idea from a picture in a magazine sent out by our bank,” says Orr, who recently retired from a maintenance position with a large Minnesota manufacturer to a small “hobby” farm in Cannon Falls, Minn. “I used junked parts from several different machines to build it.”

The key component of the splitter is a 1260-lb. 6½-ft. dia. steel wheel that was originally used by a utility company to dig narrow trenches for burying electrical cable. Orr removed the carbon steel cutting blades that lined the outer rim of the wheel and mounted a big tool steel 9-in. splitting blade on it.

“The blade turns at 40 revolutions per minute or once every 1½ seconds. It’s painted flourescent orange so it can be easily seen. I watch the cutting table and when I see the blade go by, I slip in the wood and step back,” explains Orr.

The blade cuts so fast through any chunk of wood up to 28 in. long that the split wood doesn’t jump or fly off the small cutting table. It simply falls cleanly apart.

“Because of the design, I can stand up and work at a comfortable, less tiring height. As the wood splits, I throw it into a trailer,” Orr says, noting that he can loosely fill a one-cord trailer in about an hour.



Splitting blade is painted fluorescent orange so it can be easily seen as it rotates.

The big splitting wheel spins on double tapered timken bearings which come with the wheel. Orr says this type of ditching wheel is used extensively by utilities. He bought his for \$100.

A smaller flywheel mounted on the splitting wheel shaft is driven by three V-belts and controlled by a slip clutch/idler pulley arrangement. Power is provided by an old 2-cyl., 25-hp. John Deere combine crank-start gas engine, which runs at a slow idle when the machine’s in operation. Everything is mounted on a two-wheel trailer that has jack stands in each corner to provide solid footing. He spent \$100 dollars for the wheel, \$125 for the motor, \$90 for a replacement sleeve on one of the bearings, \$50 for a pulley, \$50 for the V-belts and another \$40 or so for mis-



Semi tractor is stripped of its fifth wheel and the frame lengthened to the desired wheelbase.

### MANEUVERABILITY OF A STRAIGHT TRUCK

## Semi Tractors Make Great Straight Trucks

“There are a lot of used semi tractors sitting in lots around the country that are in good shape and can be bought at a reasonable price,” says Larry Brandenburg, sales manager for Crysteel Distributing, Inc., Lake Crystal, Minn.

The company converts used semi tractors to tandem and tridem straight axle trucks ideal for hauling grain and fertilizer.

“Semi’s need a lot of room to turn around and it can be a real problem trying to maneuver them in fields and on narrow country roads. With a semi tractor converted to a straight truck you’ll have a more powerful rig than a conventional straight truck and, by pulling a pup trailer, have about the same hauling capacity as a semi with better maneuverability,” Brandenburg explains.

“You can find a good used diesel truck for right around \$10,000. We can modify most any truck but steel frame trucks are easier and cheaper to modify than aluminum frame rigs. Also, we find it’s better to have a truck with spring suspension rather than air ride because of all the weight that’s on the front wheels of the modified trucks. It also helps to find a

truck with power steering, although this can be added later.

“When we get the truck, we take off the fifth wheel and then cut the frame just behind the cab and add a section to make the wheelbase the desired length. A second frame is then set on top of the first frame and the drive shaft is rebuilt. After that, we install a hoist and a grain box. We can also install a number of options, including power steering, a pusher axle and a pintle hitch for the pup trailer. The hitch is set so you can unload the truck dump box without unhooking the trailer.”

Brandenburg says there are a number of other shops around the country that could do the conversions. He notes that it’s important to check with the state transportation department to determine weight limits on the axles.

Cost for a converted truck, not counting the cost of the used tractor, runs \$9,000 to \$12,000 depending on the features you select.

For more information, contact: FARM SHOW Followup, Crysteel Distributing Inc., Hwy. 60 East, Lake Crystal, MN 56055 (ph 507 726-6041).



Converted semi tractor, with pup trailer, provides “capacity of a conventional semi at a lot less cost and is much more maneuverable.”

cellaneous parts. He already owned the trailer.

“It looks dangerous but I have never even had a close call,” Orr told FARM SHOW. “The wheel is on a slip clutch with a release lever right near the operator. If you get a piece of wood in crosswise, that’s enough to stop the wheel. But stopping it won’t cause any damage.”

About the only change Orr has made on the splitter since building it is to disconnect a bell which originally signaled when the blade was coming around. Instead he painted

the blade orange because he “could see faster than he could hear.” He has not been able to loan the splitter out to neighbors because of the liability problem but he says the machine would be great for anyone interested in cutting wood commercially.

Orr is willing to give advice by phone to anyone interested in building their own “big wheel” splitter.

For more information, contact: FARM SHOW Followup, Hollis Orr, Rt. 2, Box 470, Cannon Falls, Minn. 55009 (ph 507 263-4504).