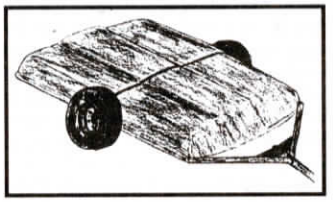
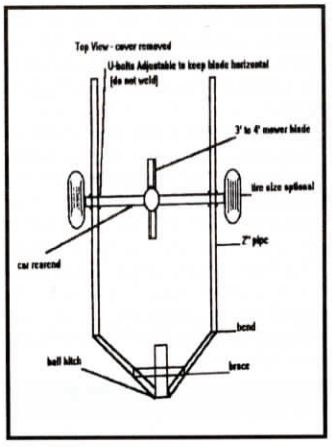
Ground-Driven Mower Made From Car Axle

Used car axles make great ground-driven mowers, says J.E. Thele, Ada, Okla., who built his first ground-driven mower over 25 years ago and has used it ever since to mow grass, weeds, and brush on his farm.

"It cuts a swath as clean as any mower you can buy, but is definitely a lot cheaper," says Thele. "It cuts a 48-in. swath without the need for a pto shaft or a big tractor. I built my first one for $25 and recently built another one for less than $100."





To make the rigs, Thele removes a rear axle from a rear wheel drive car and positions the rear end so it faces down. Then he bolts one or two 3- or 4-ft. long blades to the yoke coming out of the gearbox. A heavy-duty frame made out of 2-in. dia. steel pipe supports the rear-end mower with a tongue on front to pull it.

The wheels on the axle reverse-drive the rear end which rotates the cutting blade. "Any time the axle's wheels are moving, the blade is turning. It really does a good job. I use it on my farm to keep brush down in my pasture. I've never tried it for chopping corn stalks but I don't see why it wouldn't work."

Thele says he usually runs the mower at a 3- to 4-in. height. Blade height adjusts by removing a pin from a pipe extension on the yoke and raising or lowering the blade.

Blade speed depends on how fast the mower is towed and on tire size. "The smaller the tire, the faster the blade turns and vise versa," says Thele. "The blades are covered by a shield made from two car hoods welded together, keeping rocks and brush from flying at the driver. There's no way to keep the blade from turning in transport so you have to be careful at all times."

Thele sells complete drawings and instructions on how to build a ground-driven mower.

Contact: FARM SHOW Followup, J.E. Thele, Box 2614, Ada, Okla. 74821 (ph 405 332-3540).

He Built A Better Post Hole Digger

"My homemade post hole digger has two big advantages over anything you can buy from a manufacturer," says Bob Hasenkamp about the heavy-duty post hole digger he built five years ago.

"First, it turns at about half the rpm's of a standard posthole digger, so you've got better control. If you hit a root or a rock it won't screw itself into the ground so fast you don't have time to react," says the Soldier, Kan., farmer. "What's more, my auger is designed to telescope so you can set corner posts 6-ft. deep and regular line posts at a uniform 4-ft. depth without any guesswork."

Like any digger, it must be operated with care, Hasenkamp notes. "Post hole diggers are dangerous because of the number of exposed moving parts," he says. "However, if you observe all safety precautions and use plain common sense - with mine or any other - you reduce your risk of injury to virtually nothing."

Hasenkamp's digger uses the telescoping drive shaft and gear reduction box off a junked mid-1960's New Holland square baler.

He welded a bigger, 1 1/2-in. square shaft onto the gear box's output shaft and then welded 12-in. dia. auger flighting off an old post hole digger onto a piece of pipe. The pipe fits over the square shaft so the auger slides up and down on it.

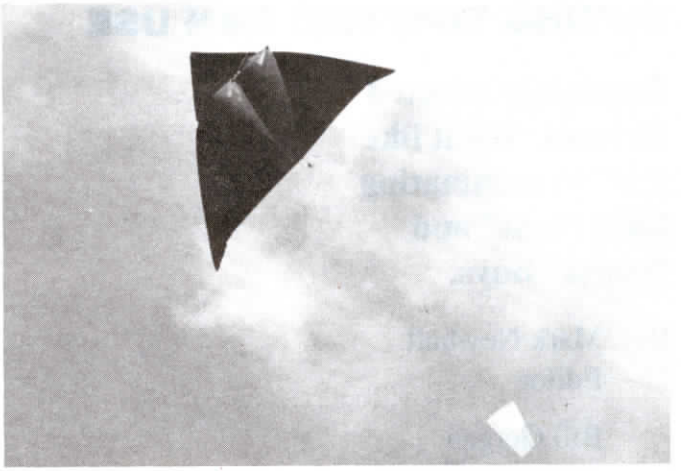
A spring-loaded pin fits into holes drilled halfway down the auger flighting and inner shaft. By pulling the pin, Hasenkamp can slide the auger out to switch from digging 4-ft. deep holes to 6-ft. deep holes. A metal stop welded to the bottom of the inner shaft prevents the auger from sliding out too far.

Hasenkamp's post hole digger mounts on his Massey 1080 tractor's 3 pt. hitch and clears the ground by about 4 in. when it's fully extended and the hitch is raised all the way up.

"When you put corner posts in 6-ft. deep, a bulldozer couldn't budge them," Hasenkamp says. "Then, since there's no reason to set line posts that deep, you can shorten the auger up to 4-ft. deep.

"My post hole digger weighs about twice as much as any commercial model I've seen so it'll stand up to about anything," he adds.

Contact: FARM SHOW Followup, Bob Hasenkamp, Box 880, Soldier, Kan. 66540 (ph 913 868-2441).



Bird Scaring Kite

"No self-respecting bird is going to peck away at crops when there's something hovering high over his head," says Malcom Cochrane who manufactures a bird scaring kite.

It has a 3 1/2-ft. wingspan and a new tail that gives it stability. When flown on its 42 1/2-ft. aluminum pole and 39-ft. line, the kite will automatically launch and relaunch as winds come and go. The pole allows kite to be flown around orchards, near buildings and tall trees where other kites can't be used.

Sells for about $30. Pole, guylines, pegs and clips are about $108.

Contact: FARM SHOW Followup, Cochranes of Oxford Ltd., Leafield, Nr Witney, Oxford, Great Britain, 0X8 5NY (ph 01993 878641; fax 01993 878416).

Truck Axle Converts Combine To 4-WD

Kansas farmer Lawrence Penka converted his 1971 Ford 622 combine to 4-WD by replacing the rear axle with the front axle off a junked-out 2-ton 4-WD truck.

Penka paid $200 for the axle. He completely removed the original axle and mounted the truck axle, welding the centers of the truck's 20-in. wheels inside 13.9 by 26 wheels (salvaged from a Deere 45 combine) so that the rear wheels would follow in the tracks of the front wheels. He mounted a gearbox (salvaged from an Allis-Chalmbers pull-type combine) between the transmission and driveshaft, using a short length of driveshaft to connect the gearbox to the transmission. The back end of the driveshaft is connected to the truck axle by a double 13-tooth sprocket and another larger sprocket. They chain-drive a short length of driveshaft that's hooked up to the truck axle.

"It was a fairly simple job. By using a driveshaft to connect the rear axle to the combine's transmission I don't have to synchronize anything," says Penka. "The gearbox slows down the driveshaft so that the rear axle doesn't run too fast. It runs a little faster than the front axle to help it steer. It keeps running at the same ratio as the front drive axle even when I shift gears. A steel rod extends from the gearbox up through the bottom of the cab so that I can put the gearbox in gear. When the ground is hard and dry I remove the chain and put the gearbox in neutral so that the driveshaft doesn't run. Saves wear and tear."

Contact: FARM SHOW Followup, Lawrence Penka, Rt. 1, Box 194, Garnett, Kan. 66032 (ph 913 448-6501).

Photo by Janis Schole

"Dairy Swing" Entertains Kids

Lyle and Joy-Ann Brown's two children, Spenser and Nicolas, are kept busy and out of trouble during chore-time with a homemade swing that hangs by chain from a rafter in the couple's dairy barn on their farm near Legal, Alberta. It provides hours of entertainment for the children while their parents tend to the needs of their small dairy herd.