



Push-off fork fits any loader (single or double-acting cylinder).

MAKES IT EASIER TO STACK BALES

Push-Off Bale Fork

"It's the first push-off big bale carrier on the market," say representatives of Howard-Farmhand, manufacturers of a bale fork for front-end loaders that'll unload bales hydraulically with a push-off plate.

Howard-Farmhand, based in England, licenses the name "Farmhand" from the U.S. company for use in Europe but there is no other connection between the two companies. So far, the innovative new bale-handling accessory is not available in the U.S.

The push-off fork fits any loader and works with both single and double acting

hydraulics. The fork also features a back and forth tilt mechanism which can be used if the particular front-end loader it's mounted on is equipped with bucket-tilt hydraulics. A round bale extension lift, which will lift the bale up another 5 ft. for tall stacks, is available for use with the fork.

Push-off bale fork sells for about \$375, all brackets included.

For more information, contact: FARM SHOW Followup, Howard-Farmhand, Sutton, Wymondham, Norfolk NR18 9LR England (ph 0953 605151).

450-LB. FLYWHEEL CUTS SMOOTH, 18-IN. WIDE DITCH

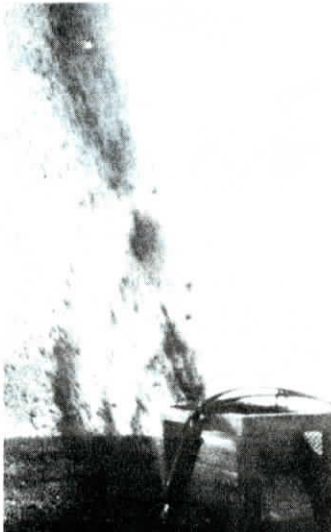
Farmer-Built Ditcher Throws Dirt 150 Ft.

"We originally built it for maintaining ditches and waterways in ridge till fields but we've sold them to farmers for just about any ditch digging or cleaning chore," says Wayne Summer, a Chokio, Minn., farmer who, together with fellow farmer Keith Stromman, invented and now manufactures a ditcher that he says "outperforms any other ditcher on the market".

Their machine uses a 450-lb. flywheel to cut out smooth-sloped ditches up to 18 in. wide and 12 in. deep in one pass. The ditcher will clean waterways with as much as 2 in. of water in them or work through up to 6 in. of frost. With a 140-hp. tractor, Summer says it'll work at speeds from 3 to 5 mph and throw dirt out over a 150-ft. area. Requires a minimum 100 hp. tractor.

"Compared to other ditchers on the market, our ditcher cuts a wider, smoother ditch and spreads dirt farther. Our one-of-a-kind pivoting 3-pt. hitch allows for precise control of the depth of the cut independent of the position of the tractor. The direct drive pto is simple and maintenance-free compared to all other rotary ditchers that have gear and chain drives. And because it's 3-pt. mounted, you can turn short and work in tight places," says Summer.

The Keway Ditcher sells for \$3,200.



Ditcher's 450 lb. flywheel digs trench 18 in. wide.

For more information, contact: FARM SHOW Followup, Keway Ditchers, Inc., Box 80, Chokio, Minn. 56221 (ph 612 324-2639 or 324-7256).



Twisted 6 in. long shanks welded to a 5 ft. wide sweep provide a double layer of tillage. Photo shows two shanks on one side of sweep.

5-FT. SWEEP PLOW FITTED WITH FOUR TWISTED SUBSOIL SHANKS

Modified Sweep Plow Busts Up Packed Subsoil

"It causes little disturbance to the soil surface but does a better job of subsurface tillage than a chisel plow," says soil scientist Lloyd Mielke at the University of Nebraska who, along with ag engineer Leonard Bashford, modified a standard 5-ft. sweep plow to fracture compacted subsurface soil layers.

The big 5-ft. wide sweep plows normally are used to till dryland wheat acres at 1 to 2 in. below the surface. Mielke and Bashford add four 6-in. long shanks to the bottom of the big sweeps and then pull them at a 3 to 4-in. depth at speeds up to 5 mph. "It gives us a double layer of tillage both above the sweep and down to 6 in. below for a total of 9 to 10 in. of tillage. The only disturbance on the surface is a 1 1/2-in. slit from the sweep plow shank," says Mielke.

Tests on the modified plow were carried out on 45% clay soil near Lincoln. Mielke thinks the idea should work in all but the heaviest gumbo soils. He says it may be particularly suited for minimum or no-till

farmers who want to occasionally break up soil without disturbing surface residue. Because of the way the modified sweep lifts the top layer of soil and fractures layers below, it greatly increases water retention, reducing erosion. For tests, the researchers pulled a 3-sweep plow - 15 ft. in total width - with a 145 hp. tractor at 4 1/2 to 5 mph and didn't quite have enough power. "A slightly larger tractor would let us pull at even higher speeds for increased fracturing of the soil," says Mielke.

The four shanks were welded to the bottom of the sweep at a 15° slant toward the rear. Part way down their length, the shanks are twisted 15 to 18° in the direction of travel. Mielke says the twist increases the soil shattering potential of the shanks.

For more information, contact: FARM SHOW Followup, Lloyd Mielke, USDA-ARS, University of Nebraska, 121 Keim Hall, East Campus, Lincoln, Neb. 68583 (ph 402 472-1514).

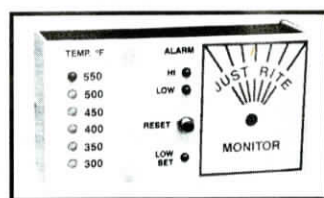
CONSTANT LED READOUT TELLS FLUE TEMPERATURE AT A GLANCE

Flue Monitor Helps Wood Stoves Burn "Just Right"

You can monitor efficiency of the fire in your wood stove from across the room with a new flue temperature monitor that gives a constant readout.

"If you know the temperature inside the flue on your wood stove, you can more easily raise or lower the fire to maintain even, efficient heat," says inventor Paul Georgis, Lehigh, Penn.

The "Just Rite" monitor can be mounted remotely or at the stove. High visibility red LED's show temperatures from 300 to 550°. An alarm can be set to alert you when flue temperatures reach preset high or low temperatures, avoiding possible chimney fires



or fire outages.

Sells for \$79.95.

For more information, contact: FARM SHOW Followup, Inventex, Inc., P.O. Box 2963, Lehigh Valley, Penn. 18001 (ph toll-free 800 345-0130).