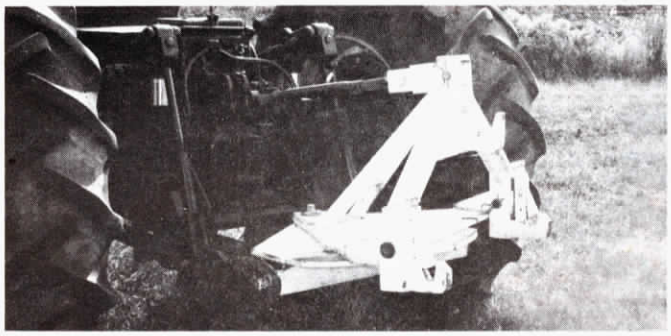


As an implement shifts position, it turns the hitch rather than forcing the operator to apply brakes.

SAVES BRAKES, SHORTENS TURN RADIUS

New-Style Hitch "Swivels" On 3-pt.

Wayne Buck, who farms near Melbourne, Iowa, was having problems with heavy, 3-pt. toolbar-mounted implements. When he pulled them across contoured land, the downward pull of the slopes forced him to ride the brakes too much to keep the tractor on the contour. After burning out a couple of sets of brakes, he asked Vern Waterman, the White Implement dealer in Melbourne, to try to solve the problem. He did — with the new Swivel Hitch.

It's basically two steel plates which slide, one on top of the other. The front half hooks to the tractor and the rear half to the implement. It can be adapted to fit either Cat. II or III 3-pt. hitches.

As the implement shifts, it turns the swivel rather than putting stress on the tractor's 3-pt. hitch, or forcing the tractor operator to apply the brakes. "I know of one farmer who was going through three sets of brakes in a season with a mounted plow," Waterman told FARM SHOW. "At a couple hundred dollars a set for some of these tractors, it wouldn't take too long to justify one of these hitches."

There are no bearings in the Swivel Hitch. One bushing takes some of the wear off the joint in the front. Waterman says a grease zerk may eventually be needed there to help prevent wear, and to increase the swivel life.

The top and bottom plates are made of 5/8 in. steel and 3/4 in. steel, respectively. The 3-pt. mountings are welded onto the swivel hitch frame.

Along with worn brakes on contours, another problem Waterman's hitch solves is the difficulty of turning at the headlands of fields. Waterman says one farmer had a mounted subsoiler that needed a turning radius of 88 ft. at the ends of fields. With a Swivel Hitch on the subsoiler, he was able to reduce that to just 44 ft.

Another advantage is that there is less twisting between the tractor and the implement, which means fewer blades and knives are broken on implements such as anhydrous injectors.

Waterman will build a Swivel Hitch on order for "about $500", but he is also interested in locating a manufacturer to refine and mass-produce his patented hitch.

For more information, contact: FARM SHOW Followup, Vern Waterman, Vern's Implement and Repair, Melbourne, Iowa 50162 (ph 515 482-3237).

Experimental "hole maker" mounts on tractor 3-pt, above. It bores a 6 to 12 in. tunnel through round bales, right.

DIGS OUT AND TRANSPORTS ONE AT A TIME

New Rock "Claw" For Big Rocks

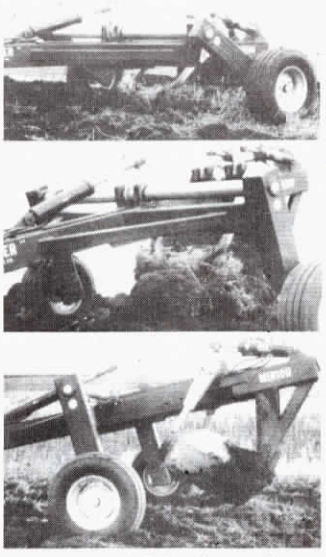
Latest new way to remove large, machine-busting rocks from farmland is the new Rock Hawker from Minion Industries. It digs out and transports one large rock at a time from fields.

A trailing two-wheeled, heavy-duty machine with powerful, hydraulic-driven claws, the Rock Hawker digs deep to pull rocks as big as 50 gal. drums — 3 to 4 ft. in dia. — out of the ground. With the rock clutched in the machine's claws, the operator drives the rock out of the field and dumps it.

"The giant claws are powered by a 3½ in. cylinder. They'll dig 34 to 36 in. into the soil to pick up rocks ranging from 18 to 48 in. in diameter," explains Larry A. Cibula, Minion president.

The Rock Hawker requires a 60 to 120 hp. tractor with dual hydraulics to operate. It's 9-ft. wide by 13 ft. long. Sells for around $4,500.

For more information, contact: FARM SHOW Followup, Larry A. Cibula, Minion Industries, Ltd., Box 1285, Minnedosa, Man. ROJ 1EO Canada (ph 204 867-2308).



Two powerful holding claws, each powered by a 3½ in. cylinder, grab the rock firmly, enabling operator to lift the rock clear of the hole and carry it from the field.

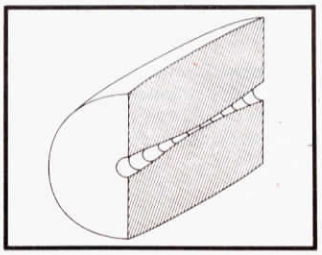
CENTER HOLE SPEEDS DRYING

"Hole Maker" For Big Round Bales

Poking holes through the center of large round bales helps them dry faster when dried artifically, indicates new research at the University of Tennessee at Knoxville.

Professor Bob Bledsoe, associate head of the Agricultural Engineering Dept., told FARM SHOW that the drying rate of large bales, when dryed in the university's experimental solar hay dryer, is about twice that of bales that don't have holes.

The machine that pierces the axial holes through the large bales was designed and built at the University. At present it is strictly for experimentation and is not suitable for commercial manufacture for on-farm use, says Bledsoe. "It would cost $3,000 to $5,000 to make and still doesn't produce a hole clear through the bale. The hole must be finished by hand boring."



"A baler manufacturer could manufacture a baler that leaves a hollow cylindrical tunnel through the middle of the big round bale," says Bledsoe. "The tunnel should be 6 to 12 in. diameter."

The center hole in large bales has not aided drying when bales were left in the field to dry naturally, says Bledsoe.

"The goal is to achieve uniform air flow through the bale," says the Tennessee engineer.

"Our dryer building is strictly experimental and can dry only 5 large bales at a time. We've designed a larger bale dryer for possible on-farm use, based on what we've learned so far. It will dry 32 bales at a time, and would be a pole-type building with the south wall and all of the shed roof acting as the collector. Heated air comes into the fan room, and one fan will serve four bales. The goal is to dry a set of bales in two days."

For more information, contact: FARM SHOW Followup, Prof. B. L. Bledsoe, Dept. of Agricultural Engineering, P.O. Box 1071, The University of Tennessee, Knoxville, Tenn. 37901 (ph 615 974-7237).