

"Fold-Up" Bucket-Mounted Bale Arms

Home-built bale arms mounted on a loader tractor bucket let Alfred Thooft load round bales fast. When not in use, the retractable arms fold out of the way on top of the bucket.

"They stick up only about 4 in. above the bucket so I hardly even know they're there," says Thooft, of Tyler, Minn. "Works better than conventional grapple forks, which are always in the way."

The bale arms are made from 2 by 4, 1/4-in, thick steel tubing equipped with 8-in, long spears on the ends. The arms pivot on 1 1/2-in, dia, steel shafts that are welded to steel plates that bolt to the loader frame. A 2-in, dia, hydraulic cylinder mounts on each arm. The cylinders are operated by an extra hydraulic valve that Thooft added to the tractor. To load a bale, he opens the arms then drives ahead and closes the arms to spear both sides of the bale.

"It grabs the bale without poking big holes in it," says Thooft. "I used the tapered ends of a car axle to make the bale spears. I cut 1 ft. off each end of the axle and bolted them to the arms so they stick out about 8 in."



Thooft uses the bale arms to load a home-built 30-ft, bale trailer that holds 12 round bales - six on each side. He made the trailer by mounting an old school bus frame on a truck axle equipped with 8.25 by 20 dual tires. The bales rest on a pair of steel cradles that are tipped to the side by pulling back on a pair of 4-ft. long levers at the front of the trailer. The levers are latched to a pair of long steel rods that run down the center of the trailer.

"I bought the bus frame for \$40 and spent a total of about \$500 to build the trailer." says Thooft.

For more information, contact: FARM SHOW Followup, Alfred Thooft, Box 54, Strong St., Tyler, Minn. 56178 (ph 507 247-3911).







Big Self-Propelled Snowblower Has 40-In. Auger, 35-In. Blower

After moving into a new house with a 600-ft. driveway, Frank Faulring, N. Collins, N.Y., realized he'd need a big machine to keep the driveway clear of snow in winter. He decided to build a big self-propelled 4-WD, 4-wheel steer hydrostatic snowblower.

The 2-stage snowblower has a big 40in. dia. auger and a 35-in, dia. blower that throws snow up to 100 ft. away.

"We've used it in snow 8 to 12 ft. deep. It has a lot of power and is highly maneuverable," says Faulring, who built the snowblower 15 years ago and estimates that he's put over 1,000 hours on it.

Faulring used 6-in, channel iron to build the frame and 3/16-in, sheet metal for the body and cab. He mounted a 200 hp engine off an International 345 heavy duty truck behind the cab, mounting the engine, fan, and radiator backward. He got a pair of 4-WD front steering axles off two Dodge W100 pickups and took a used transfer case and driveshaft from one of the pickups. He narrowed the axles to a 60-in. overall width and turned the back axle upside down to compensate for the reverse direction of the driveshaft coming out of the backward-facing engine. The front steering axle is connected to the steering wheel, with the rear steering axle controlled by a hydraulic cylinder operated from the cab. The 7.50 by 15 tires are off one of the pickups.

A 4-speed transmission with conventional clutch is used to drive the blower. The blower chain-drives a right angle gearbox that in turn chain-drives the auger.

The rig has two separate hydraulic systems - a 20 Series Sundstrand hydraulic pump at the back of the rig that's used to drive the wheels, and a belt-driven, open-center hydraulic system that's used to power all accessories. The pump is connected by a driveshaft through the radiator to the engine crankshaft, and a hydraulic motor mounted under the cab is connected to the input side of the Dodge transfer case.

The rig has four hydraulic cylinders one to lift the blower, one to turn the chute, one to control a diverter mounted on the end of the chute, and one to turn the rear steering axle.

Faulring used 3/16-in. sheet metal to make the blower and heavy steel plate to make the auger flighting. A rubber flap mounted above the auger flighting keeps churned-up snow from flying back toward the cab.

"It never fails to draw attention when we're using it. Many times the local highway plows will stop to watch the machine in action," says Faulring. "We're located in a major snow belt area off Lake Erie so we get a lot of snow."

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