

Self-propelled rig is shown here equipped with a 7-ft. wide double auger blower that's driven by a 4-speed truck transmission.

## **Built-From-Scratch Snowblower, Forklift**

Handling heavy winter snowfalls is no longer a chore for Canadian farmer Maurice Newton. He actually looks forward to moving snow thanks to the big self-propelled blower he built from scratch using a variety of components.

"I credit other FARM SHOW readers for the inspiration to build this machine. I love all the great ideas in FARM SHOW and the way people make useful machines out of parts that would otherwise go in the junk pile," says Newton.

He designed his machine around a 7-ft. wide double auger blower that he already owned. He used a heavy-duty frame from a 5-ton truck, a drive axle off a Deere 45 combine (because it was narrow enough to fit behind the blower), a cab from a Massey Ferguson combine, and a rear steering axle from a 1-ton 4-WD Chevy pickup with lockout hubs. Power is supplied by a 2000 Series CharLyn hydraulic motor that chaindrives an axle pinion gear.

A 404 cu. in. Deere diesel engine is direct coupled - with a universal joint - to a 550 Massey Ferguson hydraulic pump which in turn drives the 550 hydrostatic motor. The motor drives the imput shaft on the Deere transmission that drives the Deere drive axle. Newton had to make a special adapter to join the hydraulic motor to the clutch housing on the transmission.

To drive the blower, Newton had to machine a clutch housing to join the diesel engine to a 4-speed truck transmission that drives a one-to-one drop box which reverses the rotation of the output shaft to drive the blower in the right direction.

Finally, Newton made a 3-pt. quick hitch to hold the blower. The hitch is controlled by a hydraulic top link that allows him to tilt the blower as needed.

"The self-propelled blower has a variable speed range from 0 to 16 mph thanks to the hydrostatic control and the three ranges in the combine axle. The power steering, heated cab, great visibility and outstanding maneuverability make it a pleasure and comfort to operate," says Newton.

When he's not moving snow, he unhitches the blower and mounts a set of quick-tach forklift forks for doing jobs around the farm.

Contact: FARM SHOW Followup, Maurice Newton, Rt. 4, Shelburne, Ontario LON 188 Canada (ph 519 925-5394).



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## "Hose Holder" Makes Tank-Filling Easy

You can keep hoses from crawling out of your stock tanks with this new "hose holder" from the Roy Atherton Co.

It consists of a two-piece aluminum clamp, 8 in. long by 2 in. wide, that simply screws to the side of the tank. It tightly holds any size garden hose.

Sells for \$17.75.

For more information, contact: FARM SHOW Followup, Roy Atherton Co., 21125 S.E. Yamill, Gresham, Ore. 97030 (ph 503 666-5356).



Holder simply clamps to the side of a stock tank to keep hose from crawling out.

## Gate Opener Made From Garage Door Opener, Riding Mower

Dale McCaslin, Kansas City, Mo., used a Sears chain-driven garage door opener and the rear wheels and axle off an old riding mower to build a rugged "remote control" gate opener.

The unit bolts directly to a 16-ft. steel gate across his driveway. He can open and close the gate with the push of a button.

"It works as well as anything on the market but didn't cost much to build. I can open and close the gate right from my vehicle."

He cut the mower frame in half and used lengths of angle iron to bolt the door opener to the frame, positioning the opener on its side. The mower's rear axle was originally chain-driven off a gearbox. He shortened the mower's drive chain and connected it directly to the sprocket on the door opener. He also welded the mower's rear axle shaft and differential together in order to keep both wheels moving together. He covered it all with a sheet metal housing and used a pair of angle iron brackets to bolt the opener directly to the gate. A length of extension cord runs from the door opener up through one of the tubes on the gate to an outlet on an electric light pole that's near the gate.

"I paid \$140 for the garage door opener which came with two remote control openers and a touch pad which I mounted on a nearby fence, allowing visitors without a remote control to key in numbers and activate the door opener. If the power ever goes out the unit is light enough that I can pick it up and move it along with the gate. I think the same idea would work on most any gate.

"I mounted chains on the tires to boost traction in snow and mud. However, I still have



"Remote control" opener bolts directly to a 16-ft. steel gate across McCaslin's driveway, allowing him to open and close the gate right from his vehicle.

to recalibrate the gearing on this unit two or three times a year in order to allow for wheel slippage. If the gate weren't so heavy I wouldn't have any slippage at all."

For more information, contact: FARM SHOW Followup, Dale McCaslin, 2300 NE Barry Road, Kansas City, Mo. 64155 (ph 816 436-0272).

## **Bucket-Mounted Boom**

By Heather Thomas

"When building our pole-type hay shed we needed a way to lift the heavy roof trusses in place. My husband Lynn made a 'boom' that mounts on our front-end loader bucket to extend its lifting ability - in effect creating a miniature crane. It's easy to put on or off.

"The boom is a 15-ft. length of 4-in. sq. steel tubing with 1/4-in. thick walls. It mounts on a 6-in. wide, 1/2-in. thick steel plate that extends the width of the bucket and is bolted to it with four 1/2-in. dia. bolts. A series of 4-in. wide, 3/8-in. thick steel straps wraps under the front of the bucket. The straps work like the clip on a ballpoint pen to help hold the plate securely against the bucket. The straps simply slip on or off.

"The bottom of the boom is held in place by a pair of 3/8-in. thick angle iron brackets welded onto the plate. A 6-in. long bolt goes through the bracket and through the boom. A pair of chains, bolted onto the back of the bucket and fastened to the boom about 11 ft. from the bottom, hold the boom at the desired angle. The chains bolt onto a 6-in. length of 4-in. sq. steel tubing that's welded onto the bottom of the boom. A safety chain wraps around the boom in case the bolt ever breaks.

"Be sure to use 3/8-in. hard chain - not old chains or junk - so the chains won't break.

"To fasten the chains to the back side of the bucket, Lynn bolted on two 11-in. long, 3-in. wide angle irons and drilled a hole in them for the chain to go through. A hook at the end of each chain fastens onto the lip of the hole so that the chains can never come completely loose or undone from the back of



The 15-ft. long boom mounts on loader bucket to extend its lifting ability, in effect creating a miniature crane.

the bucket. You hook the chains back onto themselves at whatever length to create the boom angle that you want.

"A boom like this can easily lift 400 to 600 lbs. If you need to lift anything heavier you're better off using something made especially for the job."