



To switch from double tongue position (left), to ball hitch position you pull the pin and flip tongue up 90 degrees, then reinsert pin through pair of steel loops at back.

## Handy 2-Way Ball Hitch

tongue hitch by welding this "dual towhitch" over the existing ball.

With the ball removed you weld both sides of the hitch to the bumper or drawbar, then insert the ball through a hole in the hitch. A pin inserted through the hitch just behind the ball holds the double tongue in place. To switch from the double tongue to

Any ball hitch can be converted to a double the ball hitch you pull the pin, flip the tongue up 90 degrees and reinsert the pin through a pair of steel loops at the back of the tongue to lock it in place.

Sells for about \$120.

Contact: FARM SHOW Followup, James Engineering Limited, 30A Norton St., Gore, New Zealand (ph 64 3 207 1837).

#### **Livestock Carriers For ATV's**

Livestock producers can carry lambs, calves, or pigs in these handy new carriers that fit the front and rear of any 4-wheeler ATV.

The carriers are about 4 ft. wide, 2 1/2 ft. deep, and 2 1/2 ft. high. Each carrier has a gate that swings out for loading.

They sell for \$258.40 apiece or \$476 for both front and rear models.

Contact: FARM SHOW Followup, Dugron Carry Systems, C/-52 Thames St., Morrinsville, New Zealand (ph/fax 64 7 889 6550).



Carriers work great for carrying lambs, calves, or pigs.



The 3-pt. wrapper is powered by a hydraulic motor that runs on tractor hydraulics.

# Simple New "Tube Wrap" Design

It doesn't work as fast as commercial tube wrappers, but it's a lot less expensive, says the inventor of this low-cost continuous tube wrapper for round bales.

The 3-pt. mounted wrapper eliminates the need for a separate bale cradle, engine, pumps, hydraulic cylinders, axle, and tires used on conventional tube wrappers. Instead, a front-end loader is used to hold the bale in place as you drive the tractormounted wrapper ahead. The wrapper itself is powered by a hydraulic motor that runs on tractor hydraulics. The unit swings behind the tractor for transport.

Inventor Michael Laver says his prototype bale tube wrapper is practical for farmers who wrap up to 2,500 bales per year. "It will sell for about \$6,800 compared to \$20,000 for commercial tube bale wrappers," he notes.



A front-end loader is used to hold bale in place as you drive the tractor-mounted wrapper ahead.

Contact: FARM SHOW Followup, Michael Laver, 90 Millers St., Dannevirke, New Zealand (ph 64 2 554 8554; fax 06 374

### Portable Bale Feeder Rests On Ground

The manufacturer of this big portable bale feeding system says it gives you all the benefits of a portable bale wagon but without the expense of wheels and axles.

A hydraulically-controlled "retriever" is used to load and unload the bale feeder. The one retriever can be used to move any number of feeders.

The feeders are designed so that the animal has to lift its head over the top of arches and put its neck down between them, so that the head can't be pulled straight back with each mouthful. Any hay that drops falls back into the feeder.

For more information, contact: FARM



Hydraulically-controlled "retriever" used to load and unload bale feeder.

SHOW Followup, Waste-Not Stockfeeders, P.O. Box 5, Clevedon, South Auckland, New Zealand (ph 64 9 292 8077; fax 8569).



Blade mounts on subframe that runs under tractor back to drawbar.

### Angling System For Front-Mount Blade

Dairy farmer John Kuriger wasn't satisfied with tractor-mounted blades on the market so he came up with his own design. It consists of a patented front-mount linkage system and a steel subframe that runs under the tractor back to the drawbar. To change blade angle he swings the drawbar from side to side. A pair of hydraulic cylinders is used to tilt the blade and/or move it up or down.

Kuriger uses the blade on his Deere 2130 2-WD, 75 hp tractor (a European version) but says it could work on any 2-WD tractor.

"It's a simple design that pushes from down low which eliminates the need for a 4-wheel drive tractor," says Kuriger. "Commercial front-mount blades push down from the front-end loader arm position which makes them difficult to control and steer. Our subframe keeps the weight on the front axle which results in good control and no loss of steering. The blade mounts close to the tractor's front wheels where it's easier to control, and the lateral and lift loads on the blade are taken near the front axle pivot point which is a strong part of the tractor.



A pair of hydraulic cylinders and frontmount linkage system are used to tilt blade up and/or move it up or down.

"It only takes about five minutes to remove the blade. Just release the cylinders and a pin that attaches the subframe to the center of the blade, then disconnect the subframe from the drawbar.

Contact: FARM SHOW Followup, John Kuriger, Lower Normanby Road, RD 28, Manaia, Taranaki 4851, New Zealand (ph 64 6 274 8218).

#### **ATV Pulled Round Bale Feeder**

"We built it in response to demand from our farmer customers, basing the design on their suggestions," says Noel Heenan, of M.G. Heenan Engineering, about the company's ground-driven round bale hauler/unroller that can be pulled behind an ATV, tractor, or pickup.

The unit tips backward for loading. A hand-cranked winch mounted on the front of the unit is used to load the bale into the

A drive wheel on one side of the trailer is lowered onto the top of the unit's large flotation wheel to chain-drive the unloading chain web that feeds the bale out the back. The unit has a 3,000 lb. running gear.

Sells for about \$2,000 U.S. Heenan welcomes inquiries from North America

Contact; FARM SHOW Followup, M.G. 3 2304-455).



Feeder tips backward for loading. Handcranked winch on front is used to load

Heenan Engineering, Rakauhauka, No. 6 R.D., Invercargill, New Zealand (ph/fax 64