

Electronic scale is fitted with a retractable axle, cattle rack, tongue, and gear jacks.

## **Portable Scale Lowers To Ground For Weighing**

"I'd like to share an idea with your readers that has made cattle management easier at our operation," says Vernon Ranch, Lakeview, Oregon.

"I bought a portable, 13,500-lb., 7 by 14ft. electronic scale from the Powell Scale Company of Scio, Oregon. I took it to a local machine shop and fitted it with a retractable axle, cattle rack, tongue, and four 1-ton gear jacks- one on each corner. As a precaution, we disconnected all electronics before welding.

"We use the scale ourselves and rent it out to others who need a state certifiable scale. You pull it into position, put down the jacks, rotate the eccentric axle up, and then lower it to the ground.

"After we used it for a while, we found the jacks we were using were not strong enough for the job. So we brought the scale back into the shop and put two 2 by 18-in. hydraulic cylinders inside pieces of 4 by 4in. channel iron and then welded each piece of channel iron to a 12 by 12-in. steel plate. The plates bolt 4 ft. back from the front of the scale on each side. I then bolted a 3,000 psi hydraulic hand pump, purchased from Northern Hydraulics' catalog, onto one side of the scale. A 2-way valve off an old Farmhand loader directs oil to either raise or lower the scale.

"It's now very stable. The scale is only 13



Hydraulic hand pump powers 2 hydraulic cylinders that raise and lower scale.

in. off the ground when weighing, so no ramps are needed and it only takes 3 to 5 min. to raise and turn the axle for transport.

"To avoid having to remove the hitch tongue when weighing cattle, I covered the tongue with 2 by 10 boards and a 3/4-in. rubber mat and then propped up the tongue so that cattle coming off the scale won't bend it.

"This portable scale is heavily-built and maintenance-free. The state weighmaster is amazed each year at its accuracy, considering how many cattle it weighs and how much we move it around. This scale is used by a lot of local cattlemen."

Contact: FARM SHOW Followup, Vernon Ranch, HC 60, Box 1775, Lakeview, Ore. 97630 (ph 541-947-4804).



Rivard extended the pickup axles to 88 in. and mounted single rib tires on front and lugged tires on back. He also mounted a 300-gal. tank and 66-ft. boom on back.

## Widened-Out Axles On Pickup Sprayer Work Great On 22-In. Rows

Royal Rivard plants all his crops on 22-in. rows. He has an automatic guidance system on his planter that digs a trench. He had been using single-ribbed front wheels on his tractor sprayer, but the tractor often left deep tracks. He wanted to use a pickup instead, so he bought a 1990 Ford 3/4-ton F-250 pickup.

The problem he faced was that the wheels on the pickup only straddled three rows. He wanted to follow in the same tracks made by the tractor at planting so he extended the pickup axles out 11 in. to 88 in., which allows the pickup to straddle four rows like the tractor. He mounted single rib tires on front of the pickup and lugged tires on back. He removed the pickup box and mounted a 300-gal. tank and 66-ft. sprayer boom.

"Widening the axles keeps the number of tracks made across the field to a minimum, which results in less damage to my beets," says Rivard. "The pickup is equipped with a floating rear axle so it really rides nice. It's almost like having a mini commercial selfpropelled sprayer. We use it to spray two days after weeds emerge, which is about 10 days after planting. We spray two or three times every five to seven days. I don't use the automatic guidance marker with soybeans so when I spray them I replace the single ribbed tires with grip tires."

To widen out the axles, Rivard made four



Pickup axles are wide enough to straddle four 22-in. rows. Widening the axles keeps the number of tracks made across the field to a minimum, says Rivard.

11-in. long steel extension plates and welded them onto the ends of the axles. The wheels bolt onto these plates. He cut a 5-in. dia. hole into each plate so he can use an extension socket to mount the plates. He also cut off 3 in. from each of the front wheel wells in order to keep the tires from rubbing against the pickup. And he riveted a plastic deflector onto each wheel well.

For more information, contact: FARM SHOW Followup, Royal or Roger Rivard, Rt. 1, Box 170, Argyle, Minn. 56713 (ph 218 437-6479 or 6638).

## Home-Built, Heavy-Duty Crowding Gate

"I built an 18-ft. long crowding gate for my neighbor and dairyman Bill Stakenas for less than \$5,000. He says it works as good as any commercial crowding gate on the market," says Victor Larson, Freesoil, Mich.

The gate moves back and forth 180 ft. inside a holding pen connected to Stakenas's milk parlor. The gate rolls on overhead rollers that ride along a set of steel I-beam bolted to the roof trusses. Power is provided by a 1/ 4 hp electric motor equipped with a gear reduction box. The motor direct-drives a worm gearbox that's connected to a 4-in. pulley. A series of cables runs over the pulleys to move the gate back and forth. The motor turns at 30 rpm's, so the gearbox is needed to slow the gate down. The gate moves at about 30 ft. a minute.

The gate is raised and lowered by a pair of cables that ride freely up or down a pair of steel pipes at the outside ends of the gate. The cables are controlled by a 5-ft. long, 2-



Gate is raised and lowered by a pair of cables that ride freely up or down steel pipes at outside ends of gate.

## in. dia. hydraulic cylinder.

"I had never seen a crowding gate before I built it," says Larson. "Stakenas runs four batches of cows through it two or three times a day."

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