

New Products From New Zealand (Continued from previous page)



New DC Motor Powers Electric Tractor

"It'll run 8 hrs. before it needs recharging," says Ross O'Reilly, Masterton, New Zealand, who used a new 23-hp. DC motor - made in California - to make a simple conversion of an IH 254 tractor to electric power.

The 20-in. long, 8-in. dia. motor simply replaced the gas engine, bolting directly to the existing transmission. The radiator, engine hood and most other up-front components were removed to make room for a battery deck that holds 16 deep cycle batteries. Everything else on the tractor runs normally. The throttle simply consists of an electric controller that runs the DC motor. "It's like a heavy-duty starter motor with tremendous torque. It's rated at 23 hp, but actually develops about 40 hp. at low rpm's," says O'Reilly.

The tractor runs 4 hrs. at full power and 8 hrs. at half power before needing recharging. To recharge it simply plugs into a

standard 110-volt outlet.

Converting a small tractor to electric power costs about \$3,000 - \$1,000 for the batteries and about \$2,000 for the DC motor. The new electric motor, sold by Solar Electric Engineering Co., Santa Rosa, Calif., is also being used to convert existing gas-powered cars to electricity. O'Reilly says it makes possible the first practical electric-powered vehicles. A converted Ford Escort, for example, with the DC motor replacing the gas engine and hooking up directly to the transmission, will travel 60 to 100 miles per charge. Electric "fuel" costs just 3 cents per mile versus 8 cents per mile for gasoline. And the vehicles need no maintenance, aside from checking water levels in batteries once a month.

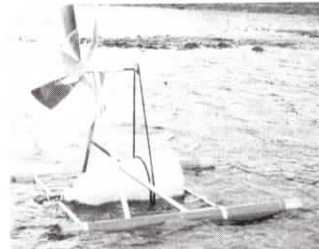
Contact: FARM SHOW Followup, Solar Electric Engineering Co., 1164th St., Santa Rosa, Calif. 95401 (ph 707 542-1990).



Water Pump Powers Itself

First-of-its-kind self-powered water pump invented in Sweden made its debut at the New Zealand Fieldays.

The JTM "Sling Pump" will pump as much as 4,000 gal. a day out of a stream less than 10 in. deep with no outside power source at all. It consists of a hollow plastic cylinder with an aluminum propeller mounted on front. A hose is coiled up inside the unit, covering the inside walls. The open end of the hose is positioned near the bottom of the cylinder, which fills up with water when anchored in a flowing stream or river. As the propeller turns the unit, the open end of the pipe alternately goes into the water and comes out of the water and then goes back in, so that first air and then water and then air are continually packed



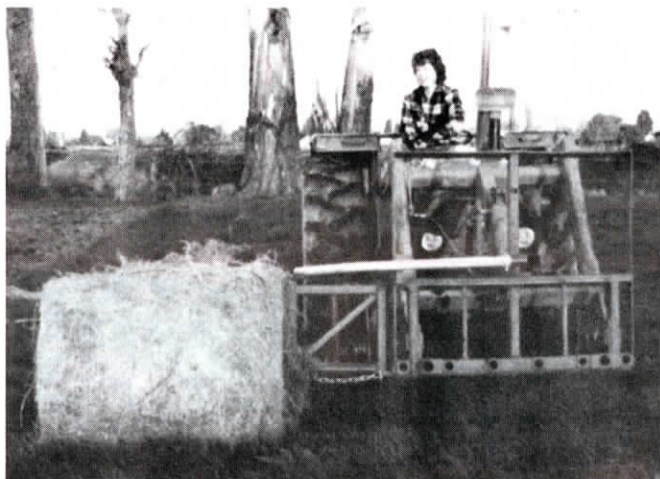
into the hose, pumping water out the end of the unit and to wherever it's needed.

It'll pump water up to a mile away at about 8 psi. "It's totally maintenance-free. We've had units running for nearly 3 years and they've never been touched," says marketing manager Hans Carlberg.

The pump is 18 in. in dia. and 32 in. long. It weighs about 20 lbs. and is made out of plastic. It can be used on lakes, ponds and other non-moving bodies of water with an optional wind-powered propeller.

Sells for \$500. Larger units that pump up to 9,000 gal. per day are also available.

Contact: FARM SHOW Followup, JTM Produkt AB, Box 51, S-980 21 Jukkasjarvi, Sweden (ph 46 0980-213 65; fax 46 0 980 212 20).



Self-Loading ATV Bale Feeder

There was a lot of new equipment for ATVs at the New Zealand Fieldays, including this self-loading bale feeder that's designed to pick up bales in the field and feed them out into bunks or onto the ground.

The self-contained unit has its own gas engine-powered hydraulic power unit. A rear-mounted fork fitted with a single hydraulic cylinder, picks the bale off the field and deposits it on the bale cradle. The

cradle has feed-out chains that peel the bale off in layers, feeding it out to either side by simply reversing the hydraulic drive motor so that the operator doesn't have to worry which way the bale is placed on the unit.

Sells for \$3,000.

Contact: FARM SHOW Followup, McIntosh Bros. Engineers Ltd., P.O. Box 4240, Palmerston North, New Zealand (ph 06 3567 056).



Double Duty Hay Fork

New double duty hay fork has a "hingeable" spear that swings out to the side for unrolling bales.

"Lets one fork do the job of two implements," says inventor Stephen Mickleson, Cambridge, N.Z., noting that the innovation could be added to any existing hay fork. He's currently looking for a manufacturer to take over the idea.

Mickleson's unit has two bale spears. The left spear mounts rigid but the right spear is on a hinging frame, anchored by a sliding bar attached to a bracket at the center of the front-end loader attached frame. A chain across the hinge also provides support.

To unroll a bale, he simply spears the bale through the center with the right spear, then swings the bale and spear out to the right



side of the tractor and unrolls it along the ground.

Contact: FARM SHOW Followup, Stephen Mickleson, Bruntwood Road, RD1, Cambridge, New Zealand (ph 071 273-249).

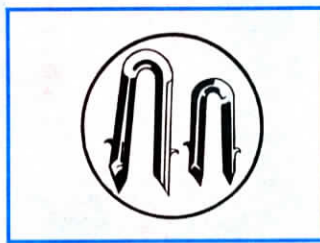
Barbed Staples Never Pull Out

Under normal livestock pressure, ordinary fence staples can loosen and eventually work out of soft wood posts.

This can't happen with new barbed staples developed in New Zealand and now available in the U.S. and Canada. Each staple has a barb "chiseled" into each leg.

Made from 8 ga., Class 3 galvanized wire, the barbed staples are available in bags of 200 in two sizes — 1.8 in. long (\$5.30 per bag) and 1.2 in. long (\$3.90 per bag).

Contact: FARM SHOW Followup, West Virginia Fence Corp., U.S. Rt. 219, Lind-



side, W. Virg., 24951 (ph 1-800 356-5458, or 304 753-4387).