

Cost for the standard articulated wagon gear, shown here, is \$1,063.

## Articulated Wagon First Of Its Kind

"It'll obsolete standard 4-wheel wagon gears," predicts Bryan Moore, director of marketing for Barrentine Mfg. Co.. Greenwood, Miss., about the company's new articulated wagon running gear.

"You can't beat it for maneuverability and easy steering. The rear wheels always follow the front, so if you clear an obstacle with the front wheels, you're sure of clearing it with the rear wheels," explain Moore.

Distance between axles on the standard five ton gear is 9½ ft. Standard wheel tread width is 80 in. Two hinged, criss-crossed bars bend to provide the articulation.

Barrentine Mfg. will custom build articulated running gears to handle different size boxes. On a soon-to-be-introduced model, cross members will telescope up to 2 ft., allowing one running gear to be used interchangeably with various size boxes. It will also feature a pinning system

which will lock the rear wheels into a rigid position for down-the-road travel at highway speeds.

"One of the articulated wagon's key features is easy backing," Moore points out. "It backs up as easy as a two-wheel wagon. No time is wasted, as is often the case with regular 4-wheel rinning gears."

Wagon boxes are bolted to bearing plates, mounted above the running gear. The new-style gear is especially suited for use with ammonia and other chemical tanks, but works great for most any purpose, according to Moore.

Cost for the standard articulated gear is \$1,063. It comes with 11 by 14-in., 6-ply flotation tires. The telescoping model will be available early this fall.

For more details, contact: FARM SHOW Followup, Barrentine Mfg. Co., Box 700, Greenwood, Miss. 38930 (ph. 601 453-7334).



With flip of a switch, bale arm throws its load into trailing wagon and in 3 seconds, is back on the ground.

## Mechanical Pitchfork Loads Hay Bales

"Does the work of four strong men," says the Canadian importer of a new one-man bale-handling device from France, designed for easy handling of conventional hay or straw bales.

Called the Nicholas Bale-Throwing Arm, it works like a mechanical pitchfork in picking bales off the ground and tossing them, with a flip of a switch, into a high-sided trailing wagon.

"The arm's pointed sharp fingers ride free over the ground on a gauge wheel," explains Robert Lemay, general manager of Forano Farm Implement Division, Plessisville, Quebec. "The driver steers the arm into a bale, then activates the cylinder which flips the bale back into the wagon and automatically drops the arm back to the ground, ready for another bale. The arm can throw a bale and be back on the ground in just 2 or 3 seconds. The driver controls all the action right from the seat of the tractor."

The hydraulic throwing arm is actually a mechanical, jointed pitchfork. Its 7 needle-sharp tines ride a few inches over the ground, going anywhere the tractor goes. It mounts on any Cat. I or II 3-pt. hitch and requires



just 35 hp. to operate. The arm can lift up to 200 lbs. and is adjustable for length. Throwing speed is controlled by flow of hydraulic fluid.

The arm is totally visible, being right up next to the driver. "Operation is simple," says Lemay. He notes that the unit will throw bales into most any high-sided bale wagon or trailer.

Cost (FOB Plessisville) is \$1,480 (Canadian dollars).

For more details, contact: FARM SHOW Followup, Nicholas Bale-Throwing Arm, Forano, 1495 St. Anne St., Plessisville, Quebec, Canada G6L 2Y9 (ph. 819 362-7395).

## First Hydrogen Car Already In Production

The hydrogen-powered car is here. You can be one of the first to own one, complete with a hydrogen "Generator", which lets you make fuel out of water right in your own garage.

Early this year, the Energy Corporation. Provo, Utah, began converting the Dodge Omni car to hydrogen and is now marketing a limited number of hydrogen-fueled prototypes at \$30,000. "The Omni is ideally suited for hydrogen power because, with its front wheel drive and cross mounted engine, there is more room under the hood, and in the trunk for hydrogen equipment," David Lyon, vice president of the corporation, told FARM SHOW.

The new converted Omni carries enough fuel to travel 105 miles but can be switched to gas with a flip of a switch on the dashboard. "Chrysler's computer controlled-ignition and timing made that possible because separate circuits let the car operate at the optimum efficiency on more than one fuel," Lyons points out. "In the past, dual fueled cars had to be set to operate somewhere in between the best setting."

The do-it-yourself home hydrogen maker plugs into a standard 220-volt outlet. Each night, you hook the car up to the machine and a water hose, and leave it. By morning, you'll have about 5 lbs. of fuel already stored in the car's special storage tank. The hydrogen is actually "absorbed" in the heavy metal alloy tank to protect the highly flamable hydrogen. Hydrogen molecules are released by the heated engine coolant when the car is running. The tank weighs 400 lbs. but is only the size of a spare tire.

It takes about 35 kwh of electricity to produce a pound of hydrogen, making the hydrogen fuel compara-



This Dodge Omni has been converted to run on hydrogen.

tively expensive — it works out to about \$1.40 for enough fuel to travel about 20 miles.

From the outside, the converted Omni looks the same as the standard version. Special equipment inside includes a special carburetor, pressure regulator, stoage tank, water reservoir and extra suspension for the added rear weight.

Ten Omnis will be converted in the

initial run and plans are to make another 100 in the near future. "We hope to improve the technology on this car—remember it's the first of its kind—and lower the cost with mass production of parts," says Lyon.

For more information, contact: FARM SHOW Followup, Billings Energy Corporation, 2000 East Billings Ave., Provo, Utah 84601 (ph. 801 375-0000).