



New "Airlift" Windmill

This simplified air-lift type windmill, invented by Aaron Beisel, Fargo, Okl., pumps water by using air pressure. The pressure is created by a compressor which is driven by a wind-powered fan.

Beisel used a simple pipe tower for his prototype installation. "Here in Oklahoma, we need to go only high enough for a rider on a horse to clear the fan. Higher towers could be constructed and the principle would still work, however," according to Beisel.

The fan blades, three in this installation, are 5 ft. in dia. and a rear fan keeps them directed into the wind as they swivel on the tower. The fan powers an ITT compressor, and a line carries the compressed air down into the well to below the water line. The air mixes with water and, because the mixture is

lighter than the water below it, rises up and out.

The fan blades are fixed pitch, constructed of aircraft metals. The compressor is durable, oil-less and maintenance-free, says Beisel. The unit weighs only about 25 lbs. Its main use so far has been to pump water for livestock.

The windmill doesn't have to be placed directly over the well. It can be erected on a hill, and a line used to carry the compressed air to a well in a nearby valley, explains Beisel. "I'd estimate that a 3/4-in. tube would be adequate for a 100-ft. distance; a 1/2-in. tube for 200 ft. If you wanted to pipe the air a mile, you might need a 1-in. tube."

Various size units can be built, but the 5-ft. unit works best with shallow wells, according to Beisel. "I recommend not to pump water from



Self-Propelled Bale "Bus"

"One man can pick up and haul 100 big round bales in one day, even if the field is 10 miles away," says Scott Miles, of New Richmond, Ind., whose self-propelled bale "bus" can move six bales down the road at 50 mph.

"I routinely pick bales up in the field traveling three to five miles per hour without stopping. This machine replaced three trucks that could haul three bales apiece, and tractors with loaders. Not to mention the men," says Miles.

He built the bale mover around the frame of an old school bus. The motor, mounted at the rear, drives through a 6-speed automatic transmission.

A hydraulic motor, belt-driven off the engine, powers the steering and bale-moving chain on the bed. A "control tower" built off to the side of the front left corner contains full controls. To load, Miles slips the fork under a bale, raises it to bed level and moves it back the width of one bale with the chain conveyor, leaving room for the next one up. The procedure is reversed to unload.

Miles, who's used the bale mover for nearly two years, says it can easily handle six 1,600-lb. bales.

For more information, contact: FARM SHOW Followup, Scott Miles, Rt. 1, New Richmond, Ind. 47967.

over 60 ft. deep."

An average well application will pump about 200 gal. of water per hour. The unit produces approximately .5 cu. ft. of air per minute in 10 mph wind. Beisel says it can be installed in 30 min. and that it is durable, even in high winds. Also, it can pump water in wind as low as 5 to 7 mph.

Beisel plans to have his idea

patented and will build units himself at a retail price of about \$500 each. "If I get hooked up with a manufacturer and the windmills can be produced in volume, the cost will be considerably less," he says.

For more details, contact: FARM SHOW Followup, Aaron Beisel, Rt. 1, Fargo, Okl., 73840 (ph 405 698-2613).



Self-Propelled Cement Mixer

"It might be impractical commercially, but it sure works for us," says Donald Tellers, of Chaska, Minn., who built himself a self-propelled cement mixer eight years ago. It'll mix a load, drive to where it's needed and dump hydraulically.

The mixer moves down the road at about 20 mph. It's pow-

ered by a V-4 Wisconsin engine, channeled through a Ford rear end. Mixing and dumping are hydraulic. The 10 cu. ft. mixer is made from an old water tank.

"This mixer eliminates the need for wheelbarrows and shoveling for many jobs," points out Tellers.

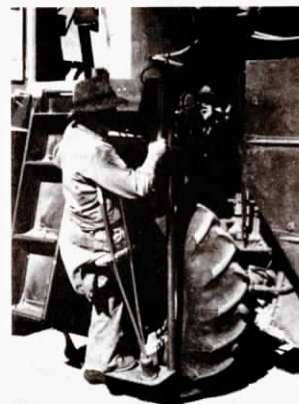
Electric Combine Elevator

Orrin Hilvety, of Moweaqua, Ill., has been handicapped since his youth. Through the years, he has modified machinery to meet his needs.

Take for example, the two self-propelled combines he owns. Getting in and out of them was a problem so Orrin equipped each of them with battery powered lift elevators. The elevators are popular with other drivers, too, who simply push a button for an easy ride up to the driver's seat.

Once seated in the cab, Orrin can operate the combine as easily as anyone. He just hangs his crutch out the side and takes over the controls.

The gear used for the elevator is from the platform control of an old pull type IH combine. Other types of reduction gears would also do the job, says Orrin. The control box has an off-on switch to energize the unit, and it has buttons for "up" and "down".



Orrin is a combination farmer and machine shop operator. For years he has innovated and built a wide variety of machinery and equipment. He gets around his farm and machine shop in an electric golf-cart type vehicle which he also designed and built himself. He has flown his own plane for years.