



The Zimmie Stacker makes teepee-shaped stacks of six bales each.



You can pick up one or two stacks at a time with no need to get off the tractor.

Square Bale Stack System Still Going Strong

By Mark Newhall, Editor

During the 20 years that I've been reporting on new inventions and products I've met a lot of innovative farmers and manufacturers. All are highly motivated by their ideas but sometimes, after running into the buzz saw that is the commercial market, they burn out. Others are so determined their ideas are great that they never give up, pushing on even in the face of a market that doesn't always give ready acceptance to their ideas.

Larry Zimmerman is such a man. We first wrote about Larry's bale handling equipment 19 years ago in our Vol. 3, No. 5 issue of 1979. We revisited Larry again 9 years later in 1988 as he made improvements to his original system, and introduced an automatic stacker.

Recently Larry called and asked if we'd like to take another look at his unit. He has a total of 320 of his manual stacking units out in the field at \$850 apiece and has sold 9 of his automatic stackers - which sell for a hefty \$8,500 apiece.

Larry still sounds like a missionary when he talks about his system is.

"It's a fantastic way to make hay and handle bales. It lets the bales dry because air can pass through, and you can totally automate bale handling because you can pick up the stacks using a tractor loader with no need to get off the tractor," he says.

Larry feels many farmers want to get away from round bales because of problems with spoilage and low quality. "There's no question you get the best quality hay with small square bales. But they're more work to handle, unless you've got a system like mine," he says.

The Zimmie Stacker is available in a manual unit that skids along the ground behind the baler. A person rides on the unit to stack the bales and release them onto the ground. It's also available in a hydraulically-operated unit on wheels that automatically lays down a Zimmie stack.

"The answer to most quality problems with hay lies with inadequate ventilation. Zimmie stacks let air flow freely through the cut bales and also allows them to be easily transported. My customers tell me they can't believe this system has not become the industry standard because quality of hay produced is so high with no molds, even on wet hay. And because we cool hay off so quickly in our stacks, we eliminate damage from heat that often affects quality of hay," says Zimmerman.

The Zimmie Stacker makes teepee-shaped stacks of six bales each, with the bottom bales laying on edge so that all air can circulate freely in and around all bales.

Contact: FARM SHOW Followup, Larry Zimmerman, Zimmie-Stacker, 1156 180th Ave., New Richmond, Wis. 54017 (ph 800 759-7033 or 715 246-4890; Web Site: <http://members.aol.com/zstack/main.html>)



On the manual stacking unit, a person rides along on the unit to stack the bales and release them onto the ground.



The stack's bottom bales lay on edge so that air can circulate freely in and around bales.



Bales can be easily transported with this loader-mounted stack handler.



Unit is also available as a hydraulically-operated model on wheels that automatically lays down a Zimmie stack.

Home-Built Equipment Makes Fencing Easier

Building fence is never an easy job but if you have the right equipment it can be a whole lot easier.

Robert Friesen is a Crooked Creek, Alberta, fencing contractor. He has three tools that he says are indispensable: a home-built, self-propelled post pounder, a modified air hammer that'll drive 6-in. spiraled nails, and a modified air-pow-

ered staple gun that drives 2-in. staples.

"Game fences are going up everywhere in our part of the country so there's always plenty of work for me," Friesen says. "When I come up with an idea that gets the job done faster, it's money in my pocket."

Here's a little more about each of his inventions:

Self-Propelled Post Pounder

Friesen's post pounder/drill is built on the frame of a Timber Toter log skidder.

It's powered by the skidder's original 453 cu. in. GM diesel engine but Friesen converted it to hydrostatic drive for greater maneuverability. He used 10,000 Series Charlyn hydrostatic motors mounted in place of the differential to chain drive the machine's axles, wheels and planetary gears. He completely rebuilt the frame of the machine to accommodate a 5-ft. wide by 10-ft. long steel deck on front for carrying posts. The main frame is built out of 10-in. dia. pipe, which doubles as a 50-gal. reservoir for water to use when drilling through rock or hard ground.

A pounder and drill mount at the back of the machine on a 12-ft. high mast that Friesen made out of 1/4-in. plate.

The pounder is housed in a steel housing measuring 13 in. wide by 10 in. deep by 32 in. high. It has three hammers at different heights timed by hydraulic gears on the top and bottom and driven by a hydraulic motor. They're all synchronized to swing together at the same time. Each hammer shaft is fitted with a 40-lb. steel weight.



Post pounder/drill is built on frame of a self-propelled log skidder.

The drill is custom-built from 9 ft. of 12-in. dia. commercial flighting and is direct driven by a 10,000 Series Charlyn hydraulic motor mounted inside the mast.

The pounder and drill are powered by a two-section, 60 gpm hydraulic pump mounted on back of the diesel engine. Another pump mounted on the engine operates backward, forward and sideways tilt, as well as horizontal adjustment up to 5 ft. left or right.

"I built the machine six years ago and have put in 25,000 game fence posts measuring 5 to 8 in. in dia. and up to 16 ft. tall with it," Friesen says. "I've put in as many as 360 posts in a six hour day."

Big Air-Powered Nail Gun

Friesen can drive three 6-in. spiraled nails in 17 seconds with the air-powered hammer he converted this fall when a neighbor asked him to help put up corral panels.

He bought the 150 psi Jet jackhammer used at a local rental store for \$250 and fitted it with a home-built retractable nail guide and socket.

The guide consists of two lengths of pipe that telescope inside each other, thanks to a combination of spiral grooves Friesen cut with an angle grinder in the outer 3/4-in. dia. pipe and a roll pin he installed in the inner 1/2-in. dia. pipe. A 1 by 2-in. steel plate with a V cut in one side to hold the nail welds to the end of the telescoping assembly and extends about 4 in. out from the leading edge of the hammer. The assembly



To make the air-powered nail gun, Friesen fitted an air hammer with a home-built, retractable nail guide.

clamps to the hammer housing with muffler clamps.

A special socket, built out of a spring-loaded pipe, bolts over themoil to hold nails. As the nail is driven, the plate on bottom of guide rotates clockwise out of the way of the nail head as the guide retracts.

Nail Gun Stapler

Friesen converted an old Stanley nail gun into a heavy-duty stapler that drives "clips" of fence staples that he glues together in a special jig.

To drive staples instead of nails, he removed the nail rigging from the bottom of the gun and fitted it with a driver he designed for staples. It consists of a 1 by 3/16-in. section of metal file welded to the end of the piston.

He built a rail to hold his homemade spring-loaded "clips" of staples which consist of 50 staples glued together with a hot glue gun in a jig. He also built a "fork" out of 3/8-in. dia. mild rolled steel and welded it to the bottom of the nail gun to hold the stapler in place while driving staples at a 45 degree angle on posts.

"Three of us once stapled up two miles of buffalo fence in four hours," Friesen says.



Stanley nail gun drives clips of heavy duty fence staples that Friesen put together himself.

"There were five staples per post and 200 posts to the mile for a total of 2,000 staples."

To power his nail driver and stapler, Friesen hauls a shop air compressor and a Honda generator with him on a two-wheel trailer behind a 4-WD ATV.

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