



William Briden of Crookston, Minn., turned an antique Twin City stationary thresher into a self-propelled combine.

## Stationary Thresher Turned Into Combine

Right after World War II, when new farm machinery was still a little scarce, William Briden, Crookston, Minnesota, needed a combine but the only ones available at the time were for direct-cut grain and they would have choked on the grain that was swathed before it was dry enough to thresh.

"Early combines would handle just the heads and a little straw. Threshing machines, on the other hand, were designed to handle lots of straw," he points out.

So Briden decided to make his own combine to handle swathed grain and straw using a Twin City stationary thresher, which he says was ideal.

"It had a 32-in., 16-bar cylinder, instead of the 12-bar cylinder being put into most combines at the time," he notes. "Twin City threshers did a better job of threshing with a cylinder speed of only 700 to 800 rpm's, instead of 1,000 to 1,200 rpm's for most combines. Because of the slower speed, they didn't wear out as fast."

Some other features that made Twin City threshing machines good candidates for converting to combines included the all-steel construction and the fact that they had a full-length non-choke sieve under the straw rack. This arrangement kept the sieves from being overloaded. "And return grain ran through a separate cylinder rather than back through the main cylinder. This kept some of the load off the main threshing cylinder, so grain was cleaner.

"They were very well built and very high priced machines," he says.

Pickup headers weren't readily available, so Briden made his own, with a 3-ft. diameter auger in it. He made the auger by welding 12-in. strips of 16-gauge steel (for flighting) around a 24-in. diameter steel tube. It had a drag chain that was made from chain he found in the junk at a local sugar beet processing plant.

"The circumference of the auger and flighting was about 9 ft., so long straw couldn't get wound around it and choke the header," he says. He added a belt pickup from a John Deere 17 combine and powered it with a 4-in. flat belt from the combine cylinder.

He took the hopper and unload auger off an old Case pull-type combine. "It took longer to unload the hopper than it did to fill it," he says. To get around that, he mounted two more similar hoppers on the combine and cut the sidewalls from between them before



Machine's hopper and unloading auger is off an old Case pull-type combine. The hopper was enlarged by cutting the sidewalls away from three hoppers and then welding them together.

welding them together. Beneath the triple sized hopper, he added a straight 10 in. unload auger.

He powered his combine with a Chrysler V-8 Hemi engine. "I don't remember the horsepower on it, but it was a lot more than the combine needed. It would handle the combine at a little more than an idle. Because we weren't making it work hard, the valves had a tendency to carbon up on it," he recalls.

"There was always a lot of rust and dust in the swaths, and air coming out of the cylinder would blow it forward onto the tractor operator," Briden says. To make it a little cleaner and more comfortable, Briden put a blower above the header auger.

He pulled his combine with a 1935 McCormick Deering WD40 diesel. "I bought it from the original owner and used it on the combine for as long as I ran it," he says. Although he's long since sold the tractor, he borrowed it back from the current owner to use to pull his combine at a steam thresher show last fall.

Briden says his Twin City combine conversion worked so well that he built a second one so he could do custom work in addition to harvesting the 500-600 acres of small grains he grew on his 900-acre farm.

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Big Bud - considered by many to be the biggest tractor ever to go into production - is now available as a detailed 1/32-scale die-cast toy from Toy Farmer Ltd.

## Big Bud Toy May Become Hot Collectible

One of the most exciting and biggest tractors ever made - the Big Bud - is now available as a detailed 1/32-scale die-cast toy from Toy Farmer Ltd., LaMoure, N. Dak.

The Big Bud first rolled off the production line in 1978. It was powered by a 760 hp engine and weighed 130,000 lbs. It could pull an 80-ft. wide cultivator and cover more than 600 acres per day.

Two versions of the new toy model are available - the 760 hp original factory version and a modern 900 hp field replica. The 760 hp version has 1978 factory decals and lettering, original black mufflers and hood, and comes with a reproduction of original literature.

The 900 hp toy version comes with modernized decals and lettering, chrome mufflers, a white hood, a collector's booklet describing the 25-year history of the tractor, its owners, and its use in the field.

The tractors measure 6 in. wide, 6 in. high, and 12 in. long.

Each tractor sells for \$60 plus S&H. When both tractors are ordered as a set they sell for a total of \$110 plus S&H.

Contact: FARM SHOW Followup, Toy Farmer Ltd., 7496 106 Ave. SE, LaMoure, North Dakota 58458 (ph 800 533-8293; fax 701 883-5209; Website: www.toyfarmer.com).

## "Husker" Gets Nuts Ready For Market

"It does the job for me, eliminating a lot of hard work and preventing small, painful wounds to the hands," says Wallace Bedell, Free Union, Va., about his home-built chestnut dehusser.

Bedell sells the nuts - minus the husks - to local grocery stores and restaurants. His dehusser consists of a pair of 3-ft. long, 8-in. dia. padded drums that rotate at slightly different speeds, providing the friction to rub off the prickly husks. The drums are belt-driven by an electric motor, with gears used to modify the speed of the drums. The entire setup mounts on top of a 4-legged steel frame.

To use the nut dehusser, he first places a plastic container of water under the drums. Then he uses a bucket to dribble nuts slowly between the rotating rollers. The nuts separate from the husks and sink to the bottom, while the husks float to the surface of the water and are scooped off.

"It works great," says Bedell, who has about 1,000 chestnut trees on his farm. "An occasional nut might get accidentally crushed, but 99 percent of the nuts come through unharmed. In the past, I dried the nuts and then husked them by hand. Now I can start removing the husks right after harvest with almost no manual labor. I think the same idea might work for other nut crops if some modifications were made to the machine.

"Some buyers want the inner shell removed, too. I can do that by making another pass and narrowing the space between the



Home-built chestnut dehusser consists of two 3-ft. long, 8-in. dia. padded drums that rotate at slightly different speeds, providing the friction to rub off prickly husks.

rollers."

Bedell had a machinist weld the frame together and do the gear work. The drums are covered with used carpet, which in turn is covered by sheet rubber used for roofing.

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