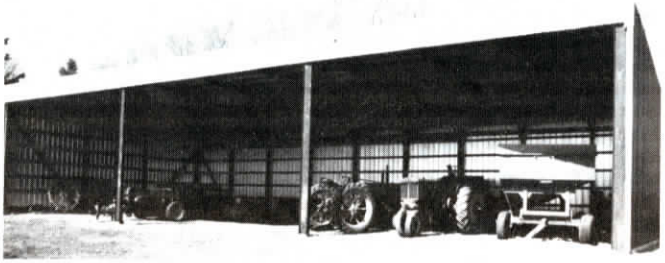

Shed is 16 ft. high in front and 13 ft. high at rear. Heinze welded 3 by 3-in. 10 ga. steel rafter plates, spaced 2 ft. apart, onto each rafter and drilled holes into them before lifting them into place with a crane. The 2 by 4 purlins are bolted to the plates.

STEEL I-BEAM FRAMEWORK SALVAGED FROM OLD TOWNSHIP BRIDGES

"Cadillac" Machine Shed Built From Junked Steel

"A lot of people said it couldn't be done," says David Heinze, Belgrade, Minn., about the open-front, high-clearance "Cadillac" machine shed he built from 10 and 12-in. steel I-beams and 12-in. wide channel iron salvaged from four old township highway bridges.

The 72-ft. wide, 34-ft. deep shed is supported in front by just four 5 by 10-in. I-beams spaced 24 ft. apart.

"I built it because I needed a bigger machine shed. The door openings on my old shed were so narrow that I had to drive my 6-row combine within inches of the doorway posts in order to fit the combine into the shed. The 24 ft. openings between posts on my new shed leave plenty of room for my combine, and the 14 ft. 1 in. of vertical clearance lets me drive in without having to fold down the combine's extension hopper," says Heinze.

"I paid $400 for the scrap bridge steel and another $1,600 for some new I-beam rafters. The entire building cost about $6,000 to build."

Heinze designed and built the entire shed without using a blueprint or any professional help. Many of the I-beams he used were 30 ft. long and weighed up to 1,200 lbs. each. Some were bent and twisted. He straightened them with his own home-built hydraulic press designed specially to straighten out the big beams (the press itself is built from some of the salvaged bridge beams). After straightening out the beams, Heinze laid them on his 30-ft. long welding table and cut and spliced them together to the proper length. Each of the walls was constructed on the ground and then lifted into place by a rented hydraulic construction crane. Rafters were then individually lifted into place and welded to the walls. The entire framework was set up and welded together in one day with the help of 11 men and two portable welders.

"It was a real challenge," says Heinze. "It took 10 days to cut, straighten, and weld all of the I-beams together to the proper lengths. Most of the beams are built from high-tensile steel and are very strong. I fish-plated any steel that was stressed or rusted out. Once the framework was in place it took five more days to install the roof and sides. All of the beams were pre-drilled so that 2 by 4's supporting the tin roof could be bolted to them."

For more information, contact: FARM SHOW Followup, David Heinze, 41008 275th St., Belgrade, Minn. 56312 (ph 612 254-8438).

A 6 by 12-in. I-beam runs horizontally across the front of the shed roof and a 12-in. wide channel iron runs horizontally across the top of the rear wall (above). The channel iron is welded to vertical 5 by 10-in. I-beams spaced 8 ft. apart. Heinze cut out parts of the channel iron (right) so that the vertical I-beam posts carry the entire weight of the rafters. Rafters are built from 3 by 7 and 3 by 8-in. I-beams that are 1/4 to 5/16-in. thick. A length of angle iron runs the length of the shed and is welded to the underside of the rafters to keep them from twisting. Diagonal braces made from 3 by 5 and 3 by 6-in. I-beams support each corner of the shed.

Heinze built this press to straighten 12-in. wide steel I-beams used on his machine shed. He uses an IH 784 tractor to power the press's 5-in. hydraulic cylinder.

"Straight-Through" Hydraulic Press Straightens 12-In. Wide Steel I-Beams

David Heinze, Belgrade, Minn., designed and built this 5-ft. 10-in. long "straight-through" hydraulic press to straighten out twisted 12-in. wide steel I-beams salvaged from old township bridges. He used the beams to build the steel frame on his 34-ft. wide, 72-ft. long machine shed.

The press is made from some of the same steel that it's designed to straighten. Four lengths of steel plate, 6 in. wide and 1/2-in. thick, are mounted on a pair of 42-in. long, 6 by 12-in. I-beams welded together with lengths of angle iron. An 8 by 12-in. H-beam on top of the press is 5/8-in. thick. The press table itself is 6 ft. 4 in. long and 20-in. wide. It's made from 3 by 12-in. channel iron, 3/8-in. thick, and can be raised or lowered by repositioning a 1 1/2-in. dia kingpin on each side. Heinze uses an IH 784 tractor to power the press's heavy-duty 5-in. hydraulic cylinder. The cylinder's 2 1/4-in. dia. shaft provides 25 tons of pressure at 2,500 psi.

"It's built so heavy that it straightens out a 30-ft. I-beam like it's playing with a toothpick," says Heinze. "When the press table is at its lowest position there's 3 ft. of vertical clearance between the table and the cylinder. I've used it to straighten out I-beams that had a 2 ft. bend. I block up the hydraulic cylinder and straighten the beams out 8 in. at a time. I built it because I couldn't find an affordable press built big enough to bend 12-in. I-beams. I tried driving my tractor over the beams to straighten them out, but it didn't work. I've even used it to straighten out the 20-ft. long, 8 by 8 frame on a neighbor's 16-row Deere cultivator."

According to Heinze, the press isn't designed to press out wheel hubs because it's so wide that it loses strength in the middle. "The real strength of my press is on the sides. If I could build it over I'd make it 1 ft. longer to get more leverage, and I'd install a 6-in. hydraulic cylinder for added down pressure."

Contact: FARM SHOW Followup, David Heinze, 41008 275th St., Belgrade, Minn. 56312 (ph 612 254-8438).

"SPIN FREE" CARRYING HANDLE

Handy New Way To Unroll Barbed Wire

Unstringing rolls of barbed wire is fast and easy with the handy new "spin free" carrying handle from the Easy Fence Co., Bulls Gap, Tenn.

The device makes unrolling wire around trees, and up and down steep inclines, as easy as carrying a small bucket of water. For big rolls of heavy wire, you can slip a short pipe through the handle to make the unrolling a two-person operation. Or, you can attach the "spin free" handle to your pickup or tractor, allowing you to unroll wire right from the driver's seat.

Small enough to carry in your pocket, the carrying handle, made of steel ands zinc coated to prevent rust, sells for $8.95, including shipping.

Contact: FARM SHOW Followup, Easy Fence Co., P.O. Box 267, Bulls Gap, Tenn. 37711 (ph 615 235-5293).

Handle lets you unstring wire rolls fast.