



Saving an Iowa Treasure

The story of the 1883 Secret Octagonal Barn

— STORY AND PHOTOS BY DAVE AUSTIN —

PHOTO ABOVE: Rich Tyler proudly standing in front of the 1883 Secret Octagonal Barn. The bank barn design allowed entry to the 2nd floor with wagons for unloading hay, while the animals could enter the first floor from the backside.

The Secret Octagonal Barn is a 2023 recipient of the Iowa Barn Foundation Award of Distinction, and it will be a must-see stop on the 2023 all-state barn tour September 16-17. In describing the barn's historical significance, owner Rich Tyler notes "There is no barn like it anywhere else in the world." Once you visit, I am confident you will agree.

Tyler, as a Humanities Iowa presenter, has spent much of the past 25 years speaking on the importance of preserving our agricultural heritage. To hear him talk, one would think that Iowa agriculture has been in his blood since he was born. The truth is that he has no farming background at all...and he is from Canada.

Tyler recounts how he first laid eyes on the barn in 1992. "I was looking for a property nearby West Branch where I could take my young children for walks, and maybe even camp. A friend told me there was a farmstead down the gravel road, and nobody lived there, and the owner might sell it to me. I visited and saw an old farmhouse and old barn...both falling down. The owner offered to sell it to me, but I wasn't sure I wanted it or what I would do with it if I did buy it. A month later, the owner said he had found someone else who was interested in buying it...and asked if I had made up my mind. Just like that, I replied OK I'LL BUY IT!! While I had always been interested in architecture, little did I know that my quick decision had just started the project of a lifetime to save an Iowa treasure."

The barn restoration was made possible with grants from the State Historical Society of Iowa and the Historic Preservation Alliance along with many hours of volunteer labor. Rich is a Humanities Iowa Speaker, and he provides three different slide presentations, 'If Barns Could Talk', 'Your Grampa's and Gramma's Farm', and 'Why Save An Old Barn'. The talks focus on the historical background and development of the Secrest Farmstead and Octagonal barn. Tyler has made the barn open to the public, including hosting dances and receptions.

The barn's history is as unique as its architecture, and Tyler has done extensive research both on the family that owned the farm and the carpenter who built the barn. Joshua and Esther Secrest purchased the land where the barn stands in 1875. They were early successful Iowa farmers in Johnson County with a farmstead of 520 acres. The average size farm in Iowa at the time was 133 acres. In 1883, the Secrest's hired the local carpenter, Frank Longerbeam, to plan and construct a large round barn to store hay and house his farm equipment, horses, and cattle. Joshua and Frank gathered around the kitchen table on the farmstead and designed the one-of-a-kind barn from scratch. This was all done despite Longerbeam having no formal training in architecture or carpentry. Tyler does note that Longerbeam had a reputation being a stickler for quality work. He noted the saying was "If the average carpenter put in three nails, Frank would put in five."

The most unique feature is the 8-sided bell-shaped roof supported by 8 laminated ribs, each composed of 18 1x6 boards. The ribs were created by soaking the boards in water, bending them into shape, then nailing (square nails!) consecutive layers of boards into place to create each rib. The ribs were then



Close-up view of one of the laminate ribs formed from 18 1-inch thick boards providing the strength to support the barn's roof.



The Secrest Barn was built first, with cattle shed being attached later, followed by an addition of a clay tile silo.



The 1912 view of the Secrest farmstead.

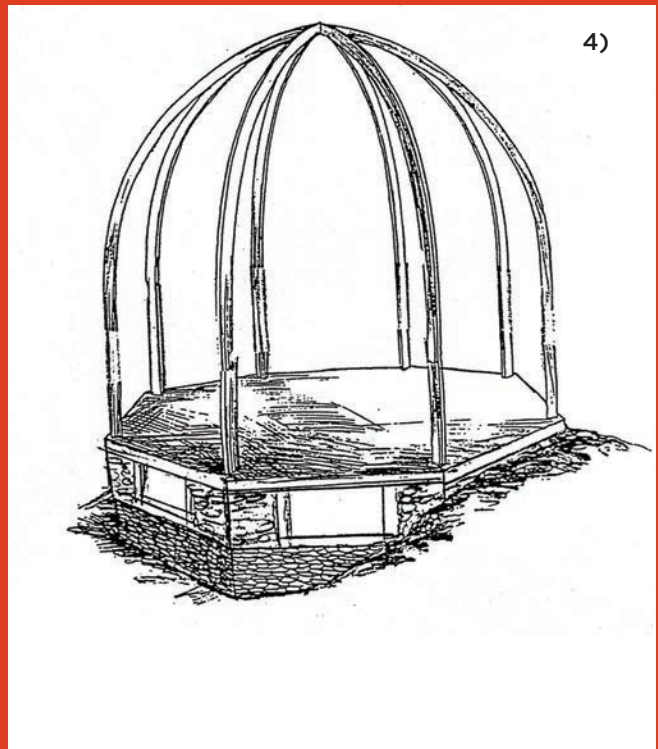
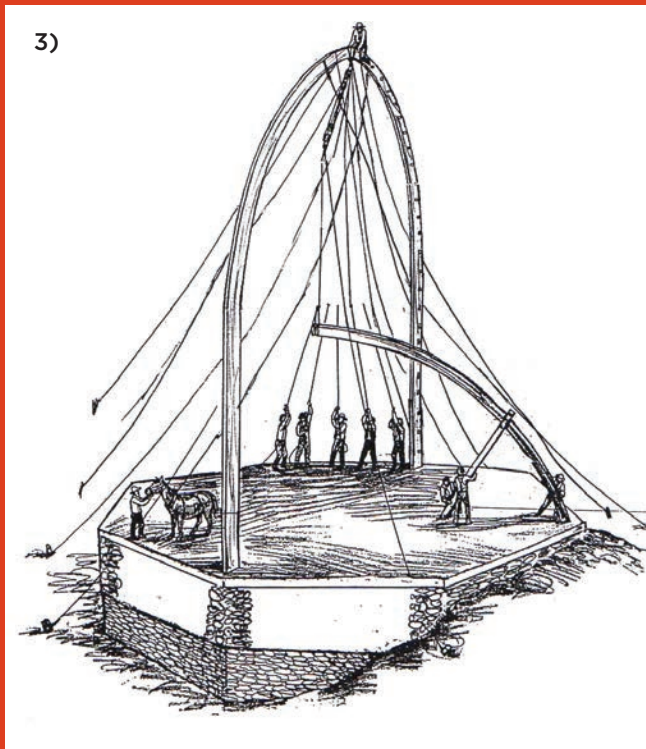
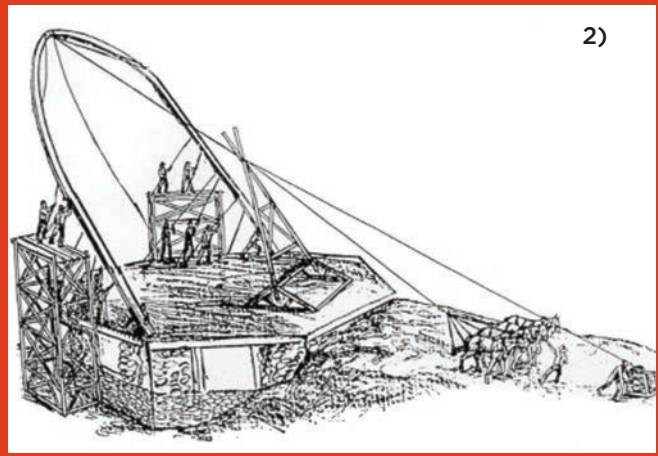
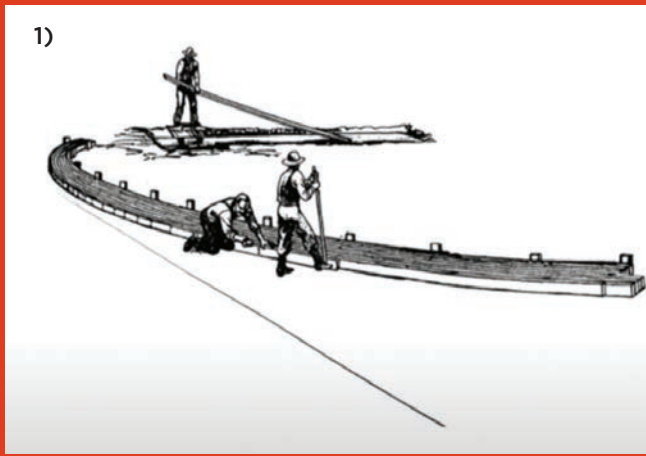


Figure Series “Building the Bird Cage” – Artist depiction of how the bell shaped roof of the barn was formed: 1) 18 1x6 boards soaked, bent into shape, nailed and bolted together to form 8 laminate ribs, 2) one complete arch hoisted into position first, 3) remaining 6 ribs hoisted into position and fastened into place 4) bird cage assembly complete and ready for finishing. Figures drawn 20 years ago (artist unknown).

secured with bolts going through all 18 boards. Tyler believes one complete arch was assembled on the ground, and horsepower was used to raise it into place using pulleys and braces. The other six ribs were then raised one at a time (see artist rendition of the building process). The end result was the massive free span haymow, which doubles as a work of art.

The Local Branch, West Branch

Newspaper, had this to say about the construction in 1883 – “J. Sechrist, a thriving farmer living 1 ½ miles west of Downey, is now finishing the foundation of a barn, which, when completed, will be the largest building of the kind in the country. It is octagon in shape, seventy-five feet height, stable room for thirty-two horses and sixteen cows, room for two hundred tons of hay, and furnished with modern improvements.”

Additional design features maximized the functionality of the barn. The three-story bank barn design was built into a hillside allowing ground level access to the lower livestock level in the back as well a front ramp leading into the second story, which was used for unloading wagons of hay into the third level storage area using a hay fork and rope system. There were 4 shafts leading down from the third story to

the ground level to unload feed for the horses and cows. The second level had grain storage areas, and it featured wooden tracks with a rail car for moving feed to the attached cattle shed. A clay tile silo was later added at the end of the cattle shed.

The barn narrowly escaped a tragic end less than a year after its construction. The Iowa City Daily Republican published this story on January 28, 1884 – “One day last week the barrack and stables of Joshua Secrest took fire from some ashes and burned to the ground, with about ten tons of hay. By hard work, the adjoining sheds and cribs were saved. The direction of the wind is all that saved his new \$3000 octagonal barn, which escaped with a good blistering. Loss about \$250.”

Round barns and their octagonal cousins are both rare. They use just as much wood as rectangular barns, but they are more complicated to build and, thus, more expensive (requiring very talented carpenters). Yet, for the same wood, the farmer gets more space and volume and a barn much more sturdy in the face of strong winds, which is part of the reason the Secrest barn may have lasted so long (aided by the quality of the craftsmanship that went into the barn’s construction).

While Tyler may have bought the barn in a “moment of weakness,” his actions since have proven how much he values Iowa’s agricultural heritage and recognizes what the barn represents - the perseverance and ingenuity of America’s early farmers. Rich is very thankful for all of the volunteers and grants that made the barn restoration possible. He gives back by making the barn open to the public for free viewing and free to use for non-profit events.



The best view from the farmstead is available from the cupola, 75 feet above the ground, accessible via a very steep set of stairs that run along the roofline. The bend of one of the laminate ribs can be seen clearly in this photo as well.



The massive first level of the bank barn had stalls for 32 work horses and 16 dairy cows.