## An Iowa Barn: Swedish Style

## by Pat Sonquist Lane



The Sonquist Home Place in 1981. (photograph by J. Haub, courtesy the author)

Tohn Sonquist was born in Ockelbo Socken, Gästrikland, Sweden, on October 13, 1829, and married Martha Person on September 25, 1854. They came to the United States in 1857, settling in Oneida, Illinois, before moving to Iowa in 1870. They just missed the 1870 census for Iowa but in the 1880 census we find the family: John Sonquist, 50 , born in Sweden; Martha, 48, Sweden; Robert, 20, Illinois; Alfred, 15, Illinois; Emma, 11, Illinois; and Charles (Charley), 6, Iowa. There are family stories about walking the animals all the way from Illinois and about it raining most of the way. It is a matter of record that John Sonquist purchased the SE 1/4 of S27-T86NR28W of the 5th PM on November 26, 1870. It

[^0]was Charley who was born on the Home Place, and Charley who later stayed on to farm it.

The Frank Peterson family (Frank, September 3, 1850, Ostra Tolstrd Parish, and Caroline Carlson, April 20, 1843, Westra Harg Parish, both Östergötland) did not emigrate until 1889. Frank had been a land overseer for a baron in Mjölby, where he had lived comfortably. When the family came to this country, they spent their first few days in Iowa in a log cabin owned by an uncle.

Charles Sonquist and Hilda Helena [Ella] Peterson were married in the Methodist parsonage in Dayton by Charley's uncle, Reverend J. E. Berggren, on March 15, 1895.

They began their family which would grow to seven children.
Charley had a forge, anvil, and bellows, and people came from a distance for his services. While they waited for their work to be finished, Charley, being hospitable, would ask them for coffee or meals. What an addition to Ella's responsibilities! One of the worst years was 1902 when their new house was built. Gerald was born just prior to the building of the house and had a stomach disturbance which kept him vocal without respite. Ella had to cope with all of it: meals, lunches, new baby, and regular duties. The hired man often knew and understood a family better than anyone else and filled in wherever needed, in many roles. In 1902 their hired man was Charley Bloomquist, a $6^{\prime} 6^{\prime \prime}$ man with noticeably large feet. Without being asked he would come into the house at mealtime and pick up the squalling baby, walking the tiny bundle to and fro, quieting him, and giving Ella a little peace and quiet in which to finish dinner preparations and get everything on the table.
In 1902 John deeded the west eighty acres to his son, Charley, and the east eighty acres to his daughter, Emma. This became the Nordstrom Home Place. After his wife, Martha, died in 1904, John lived several years with Charley and later with Emma, until his death in 1912.

Charley wrote with an elegant script and was township assessor for several years. He took the initiative in the drainage of the wetlands, was active in the Netzell school which his children attended, the Farm Bureau in Webster County, and the development of the Dayton Grain Co-op. He always took pride in his livestock. It was Charley who planned for and built the present basic buildings on the Home Place. It was Charley who built the barn.

In 1913 Charles Sonquist was 40 and his wife, Ella, was 38 . The children living at that time were Leslie, Myrtle, Gerald, Helen, and Verner, ages 15, 13, 11, 9 and 2.
"The barn was built as they were in Sweden, no nails in the frame, put together with pegs. It was 50 feet long and 40 feet wide. Frames were made lying on the ground." In her letter containing this description of the barn on the Sonquist Home Place, Hazel Manguson Sonquist included a photograph of it. It was built in 1913 and is "still standing straight and strong."

The barn was started in the spring of 1913 and took about two months to build. Since the corn crib and machine shed were built at the same time, work went on into the summer. Nels Peterson, a 60 -year old Swede, was the contractor. His helpers were Eric Carlson, 50, Ira Campbell, 28, and John Malmberg, 22. All four lived eight miles away in Pilot Mound and Charley or Les would drive down in an old surrey on Monday to pick them up and on Saturday the men would be driven home. Sometimes they took the Minneapolis and St. Louis Railroad (M \& StL) to South Dayton and were picked up there. During the week the men slept on the farm and were fed the entire time by Ella. The carpenters worked eleven hours each day, from 6 A.M. to 6 P.M. with an hour's rest from noon to one o'clock. Their wages per hour were $25 \phi$ for Nels, the foreman, $20 ¢$ for Eric, and $17^{1 / 2 \propto}$ for Ira and John. Axel Carlson, the hired man at that time, sometimes helped too.

They decided to locate the barn, corn crib, and machine shed about 150 feet north of the east-west road, giving plenty of room for the work which would take place around the buildings. Building on a north-south axis meant that the hay mow would have good air circulation in summer and all of the buildings would have their more closed ends toward the winter north winds.

The lumber was purchased from the Dayton Lumber Company and Charley hauled it out to the farm, about four miles, on a wagon-box
frame. Foundation materials and equipment were also readied for use.

Concrete was mixed by hand in a mortarbox and hauled to the building in a wheelbarrow. The mix was $31 / 2$ or 4 units of sand to 1 unit of cement. First the sand and cement were mixed together very carefully. Then the proper amount of water was added to make the right consistency. John and Ira did all the mixing, using a mortar hoe to work the cement. The hoe blade was about eight inches wide with two holes in it for the mix to pull through.

The $40^{\prime} \times 50^{\prime}$ concrete foundation was completed in one day and left to dry while the carpentry continued. The foundation was $8^{\prime \prime}$ wide and averaged about $24^{\prime \prime}$ high, except for the northwest corner, which needed $30^{\prime \prime}$ to be level. A $6^{\prime \prime} \times 6^{\prime \prime}$ sill was bolted to the entire cement foundation, except for the twelve $6^{\prime \prime} \mathrm{x}$
$6^{\prime \prime}$ openings into which the legs of the four horizontal main frames would be pulled into place. Carbide cans $2^{\prime}$ long and $15^{\prime \prime}$ wide were used as forms for the four interior supports. A bolt was placed in this support form and the $6^{\prime \prime} \mathrm{x}$ $6^{\prime \prime}$ post was set on the bolt. A concrete floor for the cows with a gutter to the back was poured, extending around the four concrete interior supports. There was dirt under the horses at that time, a cement block being added much later.

The frames and cross-supports were cut, pegs were made, brace openings or grooves were drilled and chiseled, and the four horizontal main frame supports were completed on the ground before any portion was placed on the cement foundation. All of the sawing was done with handsaws, a ripsaw for the ripping and a crosscut saw for cross grain work. The


The Sonquist barn, built with a pegged frame using the Swedish method, in 1913. From left to right: Charles Sonquist holding the horses, Ernest Peterson, Verner, Leslie, and Helen Sonquist, and Frank Bloomquist. (courtesy the author)


The floor plan of the Sonquist peg frame barn. (design courtesy the author)
pegs were made out of hardwood. Lengths of oak about $1^{\prime \prime}$ square were cut, then driven through a metal die attached to a strong frame. This made a uniform wooden peg. The pegs were sawed off flush with the wood surface after being hammered into place. A drilling machine with a seat for the operator was used to drill the holes for the pegs. The drill could be adjusted to enter the wood at different, uniform angles. It was also used with a $2^{\prime \prime}$ wood bit to drill out three circles close together where a groove was needed for $4^{\prime \prime} \times 4^{\prime \prime}$ or $6^{\prime \prime} \times 6^{\prime \prime}$ braces
on the frame of the barn. A large wood chisel was then used to chisel the opening to the right size. Finally the horizontal frames were constructed on the ground and all the other supports and braces prepared.

The barn raising required about twenty people, some using pikes made of $2^{\prime \prime} \times 4^{\prime \prime}$ s with pointed ends to hold the frame steady, and some using ropes to hoist and steady the frame after the pikes had raised the sections high enough. Nels had a high-pitched voice


The frame to make $l^{\prime \prime}$ square hardwood lengths into uniform round pegs. (design courtesy the author)


An adjustable drilling tool for peg holes and brace grooves.


Circles were drilled with a $2^{\prime \prime}$ wood bit, then chiseled to make a rectangular notch to receive the braces. (design courtesy the author)
and called out, "Heave HO, heave HO," the big lift coming on the "HO." The north horizontal main frame was raised first and then number two. Cross bracing joined the two securely. Frame number three was raised and braced to number two and finally the southernmost frame, number four, was raised and braced to number three, completing the cross bracing.

Positioning the first brace for the hip of the roof was a difficult feat. The barn stood about $38^{\prime}$ high. One by one the inverted V-shaped hip braces were placed upon the top beam of the horizontal main frames. Again, they began at the north end, raising one and two, then cross bracing, up with three, brace to two, up with four, and brace to three. The west side was completed first, then the east side. The last part of the frame to go up was a twenty-two foot $6^{\prime \prime} \times 6^{\prime \prime}$ on the north end joining the west and east sides where the hip angles.

The rafters were raised by joining $2^{\prime \prime} \times 6^{\prime \prime}$ boards at hip and peak levels spaced at $2^{\prime}$ intervals. Where the rafters met at hip level, an extra block of wood on either side of the $2^{\prime \prime} \times 6^{\prime \prime}$ held each rafter in place. Wide boards were nailed crosswise on these rafter supports. Shingles were then nailed onto the boards.

The siding used was $1^{\prime \prime} \times 12^{\prime \prime}$ stock boards which stood flush on the concrete foundation and were notched at the top to fit tightly under the roof rafters. The doors were cut as the boards went up and finished later. On the south end were the big barn doors for the hay mow. The hay door at the top of the south wall had a hinged top section which was dropped down before the big doors opened out. A substantial platform, ladder, and two windows on the south end made the hay mow doors very easy to use. A bar inside across the doors held them steady when closed. There was a small platform and ladder inside on the north end to permit window access.

The barn surface was painted. Battens to cover each vertical between the boards were

The barn, front elevation. (design courtesy the author)

approximately $38^{\prime}$

22 beam, north end
hip braces, two sets for each of four main horizontal frames
four main horizontal frames with cross bracing added between $1+2,2+3$, $3+4$
$2^{\prime}$ foundation with $6^{\prime \prime} \times 6^{\prime \prime}$ sill on top

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A=6^{\prime \prime} \times 6^{\prime \prime} \quad B=4^{\prime \prime} \times 4^{\prime \prime} \quad C=4^{\prime \prime} \times 6^{\prime \prime}
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$x=$ point at which exterior vertical $6^{\prime \prime} \times 6^{\prime \prime}$ is notched to receive horizontal $6^{\prime \prime} \times 6^{\prime \prime}$ on main frame
t indicates center join of $6^{\prime \prime} \times 6^{\prime \prime}$ s. The diagram at right shows how the $6^{\prime \prime} \times 6^{\prime \prime}$ is cut to make a secure joint.


The barn, side elevation. (design courtesy the author)

approx. 38

32
$20^{\prime}$
four main horizontal frames with cross bracing added between $1+2,2+3$, $3+4$
$2^{\prime}$ foundation with $6^{\prime \prime} \times 6^{\prime \prime}$ sill on top


Sketch of the northwest pier in the hay mow showing how the main frame and cross frame meet. (sketch courtesy the author)
cut and all surfaces painted. They were then nailed into place and a second coat of paint was applied to seal the entire wood surface.

The cupola was hand-built on the ground, then hoisted to the top. Utilitarian in providing ventilation from the hay mow, it also added distinction to the barn. The old cupola is gone, replaced by a standard round metal one.

The barn is beautiful in its proportions and ingenious in its construction. All other information is best conveyed through the drawings and photographs included with this text. I know of one other smaller barn built under Nels Peterson's direction still in existence. There may be others.

There was a great deal of excitement around farms when such major projects were in progress. Each process was carefully watched. During the construction of this barn, Ella Sonquist had a hard time because her children used the frame as a jungle gym after the carpenters quit work each day. Myrtle was particularly agile, but there were no serious

The northwest interior hayloft pier. (design courtesy the author)



The hay door at the top of the south wall. The hinged top sections drop down, then the big doors open out. An inside platform makes opening and closing the doors easy. (design courtesy the author)
accidents.
After Charley and Ella retired to Dayton, Verner and his wife, Lillian Peterson, lived on the Home Place from 1938 to 1946. Then the buildings were rented until 1950 when Leslie and Hazel's son, Richard, moved in with his wife, Twylla, and took over operation of the farm. Since July 15, 1952, the farm has been owned by Leslie. Single-family ownership for 113 years and residence for 109 years reminds one that there is some stability in a changing world.


An end view of a batten to cover cracks between stock board siding. (design courtesy the author)

## Note on Sources

[^1]During these 113 years, however, there were many changes in the basic grain and livestock operations as well as in the farm buildings and equipment. In early years a 160 acre farm supported a large family. Richard now farms around 400 acres. The acre of forest trees planted in 1878 and the $1 / 4$ acre of fruit trees planted in 1882 are gone. As new roads were built whole lines of old trees were eliminated. Old trees lost were not replaced. A fourfold crop rotation system based on corn, oats, pasture, and meadow has been replaced by alternating corn and soybeans, the latter having been introduced between 1935 and 1940. Flax was sometimes grown in the early years and again during World War II. Horses were last used for planting corn in 1939. The first combine was used in 1940. There has usually been a livestock operation, now made easier by much concrete flooring and automated feeding and watering.

The buildings reflect the same changes. The size, number, and types of buildings explain the evolution of farm life and operation. After 1950 the basic house, built in 1902, was retained but a basement was dug, a gas furnace and air conditioning were added, the porch was enclosed, the chimneys removed, water was piped in, two bathrooms were added, a new kitchen and all new windows were installed, the upstairs got hardwood floors, and the house was re-sided. A large machine building, open hog house, hog house extension, drying and storage bins, and double garage were added. Many small buildings were removed over the years.
The barn and corn crib are about all that remain as they were. Besides the replaced cupola, the barn has needed only new shingles and new wood and battens in areas near the ground which received the most wear and weathering. It stands as a testimonial to timetested building methods, good materials, and fine workmanship. The barn built using old Swedish methods is "still standing - straight
and strong" on the Sonquist Home Place.

The Buildings on the Sonquist Home Place Since the Turn of the Century.

Before 1902
$W^{1 / 2} E^{1 / 2} S E 1 / 4$

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1 Old house
2 \text { Old barn}
3 Small pig house
4 Chicken house
5 \text { Blacksmith shop}
6 \text { Oat bin}
7 \text { Outhouse}
8 Trees: a) fruit b) windbreak
0 Well
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0

From 1913 to 1950


13 Trees: a) orchard b) maple windbreak c) willows, short-lived
0 Well

## After 1950

1 House (1902), remodeled in 1950s
2 Barn (1913)
3 Corn crib (1913)
4 Old hog house (pre-1950)
5 Hog house addition (1955)
6 Open hog house (1971)
7 Machine building (1969)
8 Double garage (1980)
9 Drying bin (1973)
10 Storage bin (1977)
0 Well
$x$ Automatic waterers

(9) (10)
--- indicates cement floors


[^0]:    ${ }^{\text {O }}$ Iowa State Historical Department/Office of the State Historical Society 19830031 - 0360/83/0910-0170 \$1.00

[^1]:    A variety of documentary material provided the base for this article. Land patents, military bounty land warrants. assessment records, tract books, and family histories of early settlers in Dayton Township, Webster County, offered revelant information
    The final writing of this article would have been impossible, however, without help from Gerald, Linnea, Leslie, Hazel, Richard, and Twylla Sonquist. Thank you.

