



PRESERVATION AND CONSERVATION ASSOCIATION

Volume 14

March-April, 1994

Number 2

Hazen Bridge National Register Nomination

In March, PACA presented the Hazen Bridge to the Illinois Historic Sites Advisory Council for their review and consideration for listing on the National Register of Historic Places. The Council unanimously voted to forward the nomination to the State Historic Preservation Officer for signature and then to the National Park Service for review and final listing. The following article is based on Section 8 of the nomination and details the significance of the bridge.

The Hazen Bridge is eligible to the National Register of Historic Places under Criterion C, in the area of significance of engineering, embodying the distinctive characteristics of the Pratt through truss bridge type with the addition of approach spans. The bridge is one of only four metal truss bridges remaining in Champaign County and is the only one with approach spans over a river's overflow area.

Located on the western edge of Champaign County, the Hazen Bridge crosses the Sangamon River four miles north of the present Village of Mahomet. The area is known locally as the Grand Prairie and is distinguished by low rolling topography and slow-moving, wandering rivers with wide overflow areas. During periods of high water, often in the spring, early settlers of the area recalled that fords crossing the Sangamon bottoms were often impassable to a traveler on horseback. After a heavy rain in May 1914, the Sangamon rose eight feet in nine hours.

The nearest trading center in the area was Middletown, located halfway between the larger towns of Danville and Blooming Grove (Bloomington). Middletown was established by 1826 along the principal east-west wagon road connecting the two larger communities and along the west bank of the Sangamon River at a ford four miles south of the Hazen Bridge site. Middletown's name was changed to Mahomet in the 1860s.



The historic Hazen Bridge crosses the Sangamon River north of Mahomet. The bridge was recently nominated to the National Register of Historic Places by PACA.

The County Commissioners licensed a ferry on the Sangamon River in 1836 and the first county bridge was erected in the 1850s.

Several well-defined fords across the Sangamon River were within Newcomb Township including Newcomb Ford, Thrasher Ford, Shaffer Ford, Blacker Ford and the Hannah-Tucker Ford. The Hazen Bridge was built at the site of White Ford and provided access to both Mahomet and a smaller community, Shiloh Church, to the north. This bridge was the only river crossing between Mahomet and the bridge at Newcomb Ford, nearly two miles to the north, according to the 1893 *Plat Book of Champaign County*.

Historically, the bridge takes its name from the predominate landholders to the west of the bridge. Horace Hazen arrived in Champaign County in 1876, from Vermont via Woodford County, where he purchased 340 acres north of Mahomet. His object in moving was to obtain enough land for his sons Fred, Pearl and Mark. The 1893 *Plat Book* shows extensive acreage owned by Horace, Fred, Pearl

and Mark Hazen to the immediate west of the area where the bridge was erected. In 1917, two Hazen families owned and tended 470 acres at the west end of the bridge. The Pearl Hazen family residence was nearest the bridge site; it is no longer extant.

Engineering

Many different truss types were developed in the nineteenth century, especially during the last half of the century.

The principle of the truss uses short pieces of material configured in triangles to create a beam which could span longer distances than was possible with post and beam construction. . . The structural triangle required only that its members resist forces in tension and compression and not that the vertices or joints resist rotation. By contrast, the joints of a rectangle had to resist rotation as well or deform to the shape of a parallelogram. The advantages of the

triangular configuration then were simplified joint construction and members in tension or compression only. Thus, the truss was a very simple configuration to design and build.

The Pratt truss and the British-developed Warren truss demonstrated their versatility, durability and economic desirability to such an extent that most extant metal trusses in America are a variation of one of these two forms.

In 1844 Caleb and Thomas W. Pratt invented and patented the basic Pratt truss which is distinguished by having the vertical web members in compression and the inclined diagonals in tension. Visually, the compression members are thick posts while the tension members are thin diagonals. The Pratt truss was not used often for wooden bridges, but later became the prevailing choice for trusses of iron and steel. "The Pratt truss is the type most commonly used in America for spans under 250 feet in length. Its advantages are simplicity, economy of metal, and suitability for connecting to the floor and lateral systems." There are three basic types of bridge trusses: through, pony, and deck. A through truss carries its traffic loads on its bottom chords. A through truss with no lateral bracing between its top chords is a pony truss, and a deck truss carries its traffic loads on the top chords. The most common type of early twentieth century truss bridge is a pin-connected through Pratt.

The developing transportation system of post Civil War America required not only better bridges, but affordable ones. The use of iron in truss bridges created a new technology and industry. Metal bridges could be manufactured with repetitive designs under shop conditions and with quality control. The unassembled bridge could be easily shipped to the bridge site and erected by unskilled local labor with minimal equipment. This ease of dispersement promoted the popularity of the metal truss bridge and led to a large number of local and regional bridge companies. Most bridge design and fabrication was carried out by small independent bridge companies in the latter half of the nineteenth century, when several hundred companies existed. These companies promoted their products through drummers and illustrated catalogs to often inexperienced county road commissioners. To the manufacturers credit, however, the majority of the bridges lasted for many years and carried loads larger than the ten-ton steam tractor limit often used as design loads.

A joint meeting of the Champaign County Commissioners of Highways and the County Bridge Committee met on June 14, 1893 to discuss a bridge at White Ford. Commissioner Robert Wright moved,

to Build a Bridge commencing on the east side with stone Abutments 10 or 11 ft High then a short Span of 18 feet tressel [sic] work resting one end on the masonry [sic] and the other on cylanders [sic] then the main Span of 120 feet resting on cylanders then a tressel [sic] work commencing on cylanders at the east end running West 215 ft and resting on a six foot masonry with Iron piers 18 ft high cylanders under main span 23 feet High Roadway 14 ft High Truss Tubes 3 ft in Diameter Wooden stringers on Tressel 3 x 12. 16 feet spans after getting correct measure of West Tressel 208 ft or 13 spans of 16 ft each.

On June 27, 1893, the Commissioners met and selected the second lowest bidder, "Severes [sic] Manufactory Co., Oskaloosa [sic] Ia" at a bid of \$4985.00. Another meeting was held on July 8 at the bridge site to work out some design details resulting in changes to the east abutment and adding another span to the east approach for a total east length of 34 feet.

The Seevers Manufacturing Company of Oskaloosa, Iowa was established in 1867 by Thomas H. Seevers. A native of Oskaloosa, Seevers bought an old foundry and quickly developed an extensive business; the 1882 *City Directory* lists Thomas Seevers as a manufacturer of portable and stationery [sic] engines and a builder of iron and combination bridges. The *Illustrated 1896 Souvenir Book of Oskaloosa* has an illustration of his large manufacturing facility and also shows a double Pratt through truss as part of this advertisement. The booklet also states that "the building of iron and steel bridges forms the principal part of this concern's business and during its career it has gained a reputation second to none for reliable work in this line." Building boilers and steam and hot water heating apparatus was also an important part of the company's work. The *Directory of American Bridge Building Companies* lists the Seevers Manufacturing Company in 1899 and 1901, but no record of tonnage output is available.

The Hazen Bridge is a good representative of a Pratt through truss bridge. Its most unusual feature, however, is the west approach which is comprised of

eleven pier bents supporting spans over the Sangamon River overflow area; an identical pier bent supports the much shorter east approach. According to the *Historic American Engineering Record*, the three columns comprising each bent are cast iron or steel, cruciform in cross section, and about eleven feet high. In a few locations, where lower ends of the columns are above ground, the columns are supported in the bell end of a lower pile of similar cruciform section. Integral rectangular plates at the column tops support transverse floor beams. At each end of the columns are two cast tubes, twelve inches long, one on each side of the column axis, sloped to the angle of the diagonal cross bracing rods.

According to John Nolan, retired Illinois Department of Transportation engineer of inventory and rating, the west and east approach spans' cast iron or steel column bents are unique, the only known example in the state of Illinois. The use of bridge approach spans is unusual as most bridges were built above the high water level with roads on each side. At the White Ford, however, it appears that it was more economical to build such approach spans than to use fill over the wide overflow area. Such an open construction also allowed the flood water to pass through and not back up. In addition, the Sangamon River is a very sluggish stream with wide overflows, many sink holes, and secondary drainage systems; therefore it appears that such approaches were the most economical answer to the geographical situation.

The Hazen Bridge retains a high degree of integrity, and ranks favorably in a county-wide context. As historic bridges are typically being replaced by wider modern concrete bridges, the county's historic bridges are becoming outmoded for modern traffic loads and agricultural equipment requirements in Champaign County. Three other metal truss bridges exist in the county, but two have been closed to traffic for many years; none has approach spans.

A modern bridge is currently being constructed to the south of the historic Hazen Bridge. Upon the new bridge's completion, the Preservation and Conservation Association will have ownership of the vacated historic bridge. The Association plans to work with the Champaign County Forest Preserve District and the Champaign County Development Corporation to use the historic bridge as part of a hiking and canoeing trail system.

News from the Board

Heritage Grant Program Begun

The Preservation Association has established a Heritage Grant Program this year to contribute to other not-for-profit organizations in Champaign County which are in need of financial assistance for preservation and conservation-related projects. Because the Salvage Warehouse is doing so well financially, PACA wanted to directly share some of these profits to support other projects in the community. PACA has, from time to time, been approached by other organizations in need, so this program is intended to be an official means by which PACA can share a portion of its income and in turn, encourage historic preservation in the community. The amount available for the program may vary from year to year, but was set at \$2,000. Annually, the amount will be based on ten percent of the previous year's Salvage Warehouse proceeds.

As this is the first year of the program, it is anticipated that the program will evolve slightly based on this year's experiences. The Grant Program has been left open so that the amount available may be given in its entirety, or in several smaller grants. The money is available for a variety of project categories, including bricks and mortar, land acquisition/move, and professional architectural feasibility studies. Evaluation considerations include the impact of the project on the historic property, the impact the grant will have in accomplishing the project, and the need for financial assistance. The determination will be made by the Board of Directors at the May meeting, and an

announcement will be made during National Historic Preservation Week. Our appreciation goes to the *News-Gazette* for the article on the Grant Program. PACA received a number of telephone calls as a result of this article. It is hoped that this money will enable groups to accomplish such projects as feasibility studies and building repairs for which money is not already available. Please contact PACA if you have any questions about this program.

Endangered Building List Created

PACA is creating an "Endangered Building List," an ongoing list of properties which due to a lack of repair, development pressures, and/or vacancy, may be in danger of demolition or further disrepair. Endangered Building Lists have been created in a number of communities around the country, on a statewide basis, and even nationally. The National Park Service annually publishes a list of the top ten endangered National Historic Landmarks, a list which is created with the help of the State Historic Preservation Offices. Statewide groups such as the Historic Landmarks Association of Indiana also create lists annually to call attention to significant properties which merit preservation. PACA intends to publicize the list, and use it as a priority list for our Board focus over the next twelve months. By raising concern about important historic properties in the community before the eleventh hour, PACA hopes to have a positive effect on the historic built environment. The Endangered Building List is, in effect, part of a plan to be pro-active, rather than re-active. If you have any

buildings about which you are concerned, please let us know!

New Director Needed

PACA's Board of Directors is seeking a new member to fill the unexpired term of Tim Latourette, who recently resigned from the Board due to a move out of state. The new member will serve through 1994. Please call PACA with your nominations, self-nominations are accepted.

PRESERVATION WEEK
NATIONAL TRUST FOR HISTORIC PRESERVATION



It's your memory. It's our history. It's worth saving.
M A Y 8 - 1 4 , 1 9 9 4

Preservation Week: May 8-14

History doesn't belong to historians. It belongs to all of us. We carry it around with us in the stories we've been told, in the memories that help us to know who we are and where we came from. History shapes and enriches our lives.

It enriches our communities, too, because history doesn't just live in the pages of a book or in the words on a bronze plaque. It's in the farms and factories where our grandparents worked, in the rowhouses and bungalows where we grew up, in the Main Street stores and the churches and courthouses that give our hometowns their unique identity.

This year's Preservation Week theme—

Membership Application P.A.C.A.

MEMBERSHIP CATEGORY:

INDIVIDUAL

- Adult\$15.00
- Student (1/2 time or more)\$10.00
- Senior Citizen\$10.00
- Family\$20.00

CORPORATE

.....\$75.00

ADDITIONAL CONTRIBUTION _____

- NEW MEMBERSHIP
- RENEWAL

NAME _____

ADDRESS _____

Make checks payable to: PACA, Box 2555, Station A, Champaign, Illinois 61825

Contributions are tax deductible to the extent allowed by law.

It's your memory. It's our history. It's worth saving—calls on us to recognize the important role that history plays in strengthening our sense of community, and the important role that preservation plays in keeping our history alive.

The Preservation Association hopes to use this week to spread the word that preservation works for all of us. After all, when we save the older buildings and neighborhoods that embody our history, we're not just showing a reverence for yesterday; we're also laying a cornerstone for tomorrow.

Local Preservation Week activities include a joint sponsorship, with the *News Gazette*, of the third annual ARCHITREASURES contest; announcement of the recipient of the first annual Heritage Grant given for Champaign County preservation projects, and the publication of the first Endangered Building List for significant properties in Champaign County. On May 21, PACA will co-sponsor with The Discovery Place the third annual Kids' Building Fair, in front of the Orpheum Theatre.

Save the Date!

Kids Building Fair

Saturday, May 21, 1994
11-4 p.m.
Orpheum Theatre Parking Lot

PACA Newsletter

Alice Edwards, President
Susan Appel, Vice-President
Marianna Murphy, Secretary
Perry Morris, Treasurer
Karen Lang Kummer, Exec. Director



328-PACA: Telephone & Answering Service

Printed on recycled paper

Illinois Preservation Conference

This year's conference will be held June 3-5 in DeKalb, cosponsored by Landmarks Preservation Council of Illinois, the Illinois Historic Preservation Agency and the Illinois Association of Historic Preservation Commissions.

The conference begins on Thursday evening with an opening reception at the Ellwood House Museum, DeKalb's first architect-designed house and home of Isaac Elwood, barb-wire baron. The Plenary Session on Friday morning will review last year's preservation highlights and feature Paul Green as keynote speaker. Always popular, the "4-Minute Success Story" luncheon will be held at the Holmes Student Center at Northern Illinois University. Friday and Saturday afternoons are devoted to workshop sessions on various preservation topics.

Friday evening's banquet will feature the presentation of the 1994 Driehaus Preservation Award winners. PACA and the Discovery Place will be honored for the Kids Building Fair with a Preservation Education Award. Saturday morning will be devoted to a Preservation Town Meeting with the topic: "The Future of the Preservation Movement in the United States." This is an opportunity to voice your opinion about historic preservation; conclusions will be forwarded to a national panel discussing preservation's current status. The Eastlake style Hovis House is the location for the closing conference reception. Registration is \$40.00 for LPCI members plus meal and event fees. For further information contact PACA.

New & Renewing Members

Marianna Murphy & Laird Thompson
Ann Boswell & Keddy Hutson
Marilyn & Harry Querry
Fletcher Johnson
Sharon J. Rapp
Roger & Cheryl Kennedy
Clareta Walker
Earl & Lynda Creutzburg
Lawrence E. Johnson
Roger & Dolores Yarbrough
Mr. & Mrs. Arthur Bartell
Andrew B. White
Sarah & Robert Nemeth
Sharen R. Slade

Salvage Donations

University of Illinois
Urbana Park District
City of Champaign
Friend's Meeting
Franzen Construction
Skip Binch
Rosetta Gray
The Blind Pig
City of Urbana

Salvage Crew VIPs

Bob Swisher
Al Frederick
Pius Weibel
Rich Cahill
Mike Miller
Hank Kaczmariski

NON-PROFIT
ORG.
U.S. POSTAGE
PAID
CHAMPAIGN, IL
PERMIT NO. 133