

The Plattsmouth Crossing

River valleys have always been of great importance as arteries of transportation and commerce. In pioneer days they were routes of reconnaissance and exploration into the hinterland where usually no other paths of travel were available. As new regions developed the river valleys were frequently followed by the immigrants and later by railroads and modern highways.

In the Middle West the valleys of the Ohio, the Mississippi, and the Missouri dominated the pattern of early settlement. Beyond the wide Missouri, the great Platte River valley stretched westward for nearly a thousand miles toward the Pacific. This valley was destined soon to become the chief trail to the far west, and later, upon the advent of the "iron horse," the principal route of mass transcontinental travel.

Building feverishly across the prairies of Iowa after the Civil War, several railroads converged upon the town of Council Bluffs, which Abraham Lincoln had designated in 1862 as the eastern terminus of the Union Pacific Railroad. One important road, however, the Burlington and Missouri River Railroad, subsidiary of the Chicago, Burlington and Quincy, followed a more south-

erly route across the state, heading directly for the mouth of the Platte River, some twenty miles below the Union Pacific junction at Council Bluffs. Apparently it was the strategy of this line to bypass the "Bluffs" and Omaha, and to follow a more direct route to the West.

The "Plattsmouth Crossing" of the Missouri River has always been considered an important one. In early days there was keen competition between St. Joseph, Missouri, and Nebraska City, Plattsmouth, and Omaha, Nebraska, as to which might eventually inherit the lion's share of the rapidly developing transcontinental business, and thus eventually become located upon the chief travel route to the far west. This matter, it seems, was at last definitely settled when Lincoln designated Council Bluffs as the point of origin of the Union Pacific Railroad.

This decision, it must be noted, did not deter the Burlington from continuing to take advantage of the more direct route from Plattsmouth to the Rockies via Lincoln, particularly in handling its through-freight traffic. While this traffic pattern for freight is still in operation, all through-passenger business is now routed via Omaha, an important connection productive of considerable passenger revenue.

From the advent of the white man the Platte seems to have left an indelible impression on ex-

plorers and cartographers. William Deslisle located what is undoubtedly the Platte on his maps of 1703 and 1718. Victor Collot in 1796 declared the "river Plate" was as "large as the Missouri, and runs with such rapidity, that oars and poles are insufficient to resist the current; the only mode of going up is by towing . . ., its waters are white and of a chalky color; the lands through which it flows are also chalky; its banks are bordered by small bare slopes, and the aspect of the country is in general dry and barren."

Lewis and Clark arrived at the lower mouth of the "Great River Platt" on July 21, 1804. They found the "velocity" of its current "much more rapid than the Missourie" and ascended it with great "dificuelty" a mile above its mouth. Stephen H. Long arrived at the mouth of the Platte on September 15, 1819. He noted that in periods of flood the Platte poured a greater volume of water into the junction with the Missouri than did the Big Muddy itself. Above the Platte, which is the largest tributary of the Missouri, the scenery of the Big Muddy changes and becomes more interesting. According to Reuben Gold Thwaites the mouth of the Platte was taken as the line between the "upper" and "lower" Missouri. Small wonder that the surveyors for the Burlington railroad and the Plattsmouth crossing should be quick to recognize the Platte as the Gateway to the West.

In the years that followed, other notable Americans visited the mouth of the Platte. In 1842 John C. Fremont camped for one night on the projecting bluff located just below the present site of Plattsmouth at a place still known as Fremont's Point. Six years later, in 1848, Libeas Coon appeared on the scene and commenced operating the first ferry at Plattsmouth. This was the beginning of a crossing which ever since has been important.

Two early railroads, before their consolidation, figured prominently in the history of the "Plattsmouth Crossing": the Council Bluffs and St. Joseph Railroad along the Iowa side of the Missouri, and the Burlington and Missouri River Railroad in Iowa. The latter headed westward from Burlington to meet and connect at Plattsmouth with a new company, the Burlington and Missouri River Railroad in Nebraska, and thence to proceed westward from this point.

On May 19, 1858, an organizing convention for the Council Bluffs and St. Joseph Railroad was held in the "Bluffs." Ground was broken for the construction of the railroad about a mile south of town on November 7, 1859. After many delays and reorganization, the line was finally completed to St. Joseph in July, 1868, where connection was made with roads which were already completed into St. Louis and Hannibal.

Meanwhile, the Burlington and Missouri River

Railroad in Iowa had been completed to Ottumwa on September 1, 1859. Further westward progress was temporarily halted by the Civil War, but in 1865 the road once more began to push onward across southern Iowa toward the Missouri. The last spike was driven at Glenwood in November, 1869, and service was opened to East Platts-mouth (Plattsville) on January 1, 1870. On December 4, 1869, the first Burlington train was operated into Council Bluffs over the Council Bluffs and St. Joseph line, via Pacific Junction. Regular service, however, between Council Bluffs and the East over the Burlington, was not inaugurated until January 3, 1870.

On July 4, 1869, to the accompaniment of a "brass band and a parade," ground was broken at Platts-mouth for the Burlington and Missouri River Railroad in Nebraska, on which services were opened to Lincoln on July 26, 1870. There being then no bridge or adequate ferry service at Platts-mouth capable of handling the rapidly increasing rail business, it became imperative that the company provide their own facilities.

Accordingly the road procured a transfer boat, or car-ferry, the *Vice President*, which was built on the Ohio River at Jeffersonville, Indiana, probably in 1873. Captain Peter Mann supervised the construction of the boat. When completed it was brought to Platts-mouth to enter the railroad serv-

ice. On its first voyage it carried a deckload of lime or cement in barrels from Louisville, Kentucky, to St. Joseph, Missouri. The cargo was unloaded by Negroes "driving old-fashioned two-wheeled drays, having a long tailboard and drawn by a mule."

The journey from St. Joseph to Plattsmouth was "made light, and took about two days. When we rounded Fremont Point, — blew the whistle for town, about half the population of Plattsmouth was gathered on the river bank at the foot of Main Street to greet the new arrival." The *Vice President* had a carrying capacity of five freight cars or three passenger coaches, and thus could handle considerable traffic in a day. It was manned by a crew consisting of "a captain, pilot, clerk, two engineers, two firemen, six deck hands, cook and night watchman. The captain's cabin was on the right side, and the clerk's cabin was on the left side, forward of the wheel house. The kitchen and dining room were on the left side, and bunk room on the right side back of the wheel house," furnishing commodious quarters for all hands.

The rapidly increasing flow of traffic to the West during the late 1870's soon convinced railroad officials of the necessity of the immediate construction of a bridge at Plattsmouth to replace the ferry which was fast becoming inadequate to

handle the business. The attendant delays were both annoying and costly. This project was undertaken in 1879, with George L. Morrison as Chief Engineer in charge of construction, upon authority of a charter granted ten years previously by the state legislature of Iowa.

The Plattsmouth bridge, the finest built over the river to that time, crossed the Missouri River several miles below its confluence with the Platte. It was unique in several respects. It was the second ever built of steel, the first having been built the preceding year by the Alton railroad across the Missouri River at Glasgow, Missouri. The steel employed in construction was made by the "Hay" process, an invention of the illustrious Abram Tuston Hay of Burlington, Iowa, who contributed much to metallurgical progress. Previous to this time, iron had been the metal used in bridge building, but iron frequently crystallized, became brittle, and broke without warning, with disastrous results.

From a description given by Chief Engineer George L. Morrison to J. A. McMurphy of Plattsmouth, we learn that the bridge consisted of five spans — two large spans of 400 feet each, and three "deck spans" of 200 feet each, resting on six stone and concrete piers. In addition, on the east side there were 1,560 feet of iron viaduct, 1,440 feet of which consisted of 48 spans of 30 feet each.

The bridge floor was uniform on both the iron viaduct and the five spans. On "track stringers" which were spaced nine feet apart, nine inch square oak ties were spaced fifteen inches apart. These ties, twelve feet long, were locked in place by oak guard rails ten inches square. On these ties the railroad tracks were laid. A foot-walk of two inch oak planks was built on each side of the bridge, and a wire cable for a hand rail was strung through upright iron stanchions placed at 25 foot intervals.

The cost of the bridge as reported for taxation was \$600,000. Its super-structure and sub-structure were designed by Chief Engineer George L. Morrison. The two longer spans were built by the Keystone Bridge Company of Pittsburgh.

The erection of a structure of such magnitude, in those early days before the invention and perfection of modern erecting machinery, was no small undertaking, presenting many serious problems to be handled by the engineers and construction foremen in charge of the work. After the piers were completed, a temporary trestle was built to support the permanent structure while in the process of erection. The ever-present ominous hazard of high waters caused the builders many anxious moments, but construction went forward with high efficiency and dispatch, and was finally finished about as scheduled.

The bridge when completed was subjected to severe tests before it was accepted from the contractors. The *Plattsmouth Daily Democrat* of August 30, 1880, reported that the test was made by eight locomotives which were run simultaneously onto each of the two 400 foot spans. "First to cross the bridge was the special train of the B. & M. R. R. consisting of coach 15 and locomotive 17 with Chas. Patterson as engineer and Wood conductor. Following that came the C. B. & Q. special train with locomotive 270; Andrew Johnson, engineer; dining car San Francisco, Frank Drury in charge; Pullman car Rochester, and special coach No. 50.

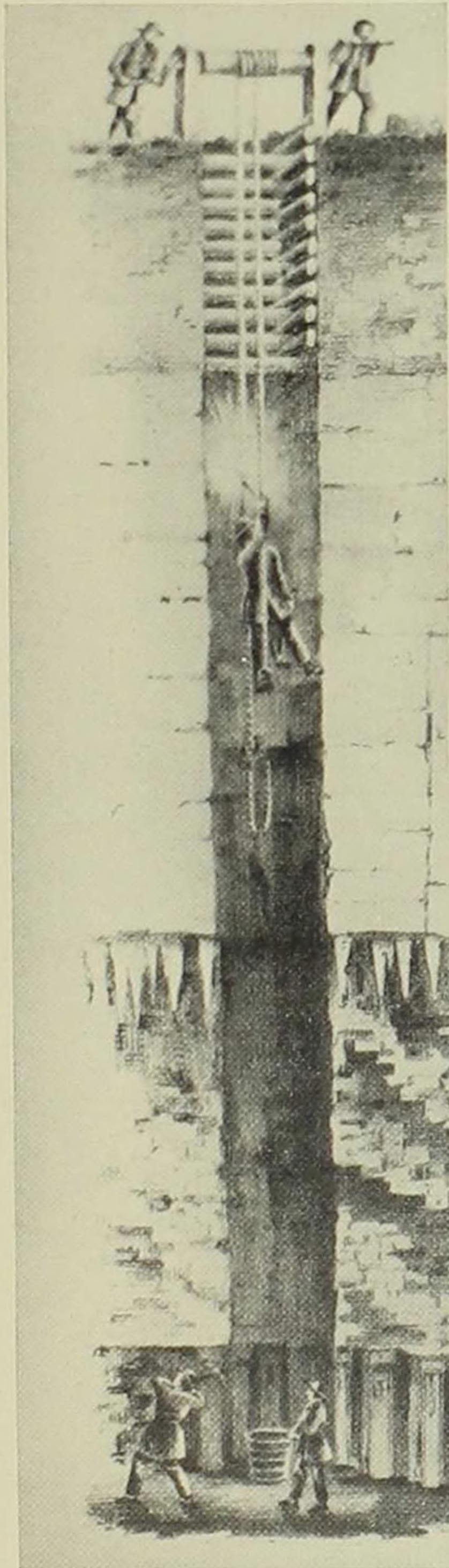
"The test engines then followed in two sections, four in each, up the long grade on the Iowa side, and when near the east end of the first span they coupled the sections together, making eight in all, and ran on the span, occupying 320 feet of the 400 feet length of span. They halted there while civil engineers with levels and instruments noted the deflection caused by the enormous weight placed upon the spans, and found that it settled in the centre only three and one-sixteenth inches, under a weight of 440 tons.

"After the locomotives were run off the span, it resumed its former position, which shows that the steel of which it is made is both tenacious and elastic, an admirable combination of qualities.

The next one west was tested in the same manner, and after it was proved safe the bridge was pronounced accepted and ready for regular traffic. All the whistles on steamboats and locomotives at once were sounded and the chorus of twenty or more blended and echoed over the Missouri bluffs.

"It was a grand sight and well repaid the lookers-on to see those powerful locomotives, of 440 tons aggregate weight, standing on the spans, and thousands were there to see it from Plattsmouth and adjoining cities. We noted Judge McDill, of the Iowa board of railroad commissioners; Hon. Wm. Hale, of Glenwood; also Mr. A. Gottlieb, of Pittsburg, who is president of the Keystone Bridge Co.

"Altogether, it was a proud event in the history of the city of Plattsmouth, and the queen city of our state (Lincoln) will soon feel, I trust, the benefit of this bridge, which connects her with the C., B. & Q. system of railway, and to the east." — "It was my good fortune," states the reporter, "to ride from Plattsmouth to Lincoln with Superintendents Thompson and McConniff and Superintendent of Telegraph Yates on the steam hand-car; and we jogged along at the average rate of twenty miles an hour with Engineer Cummings at the throttle and the brake, arriving here at 5:30 p. m." The photograph artists also improved the time and secured good negatives of the scene.



DAVID DALE OWEN
LEAD MINING AT DUBUQUE

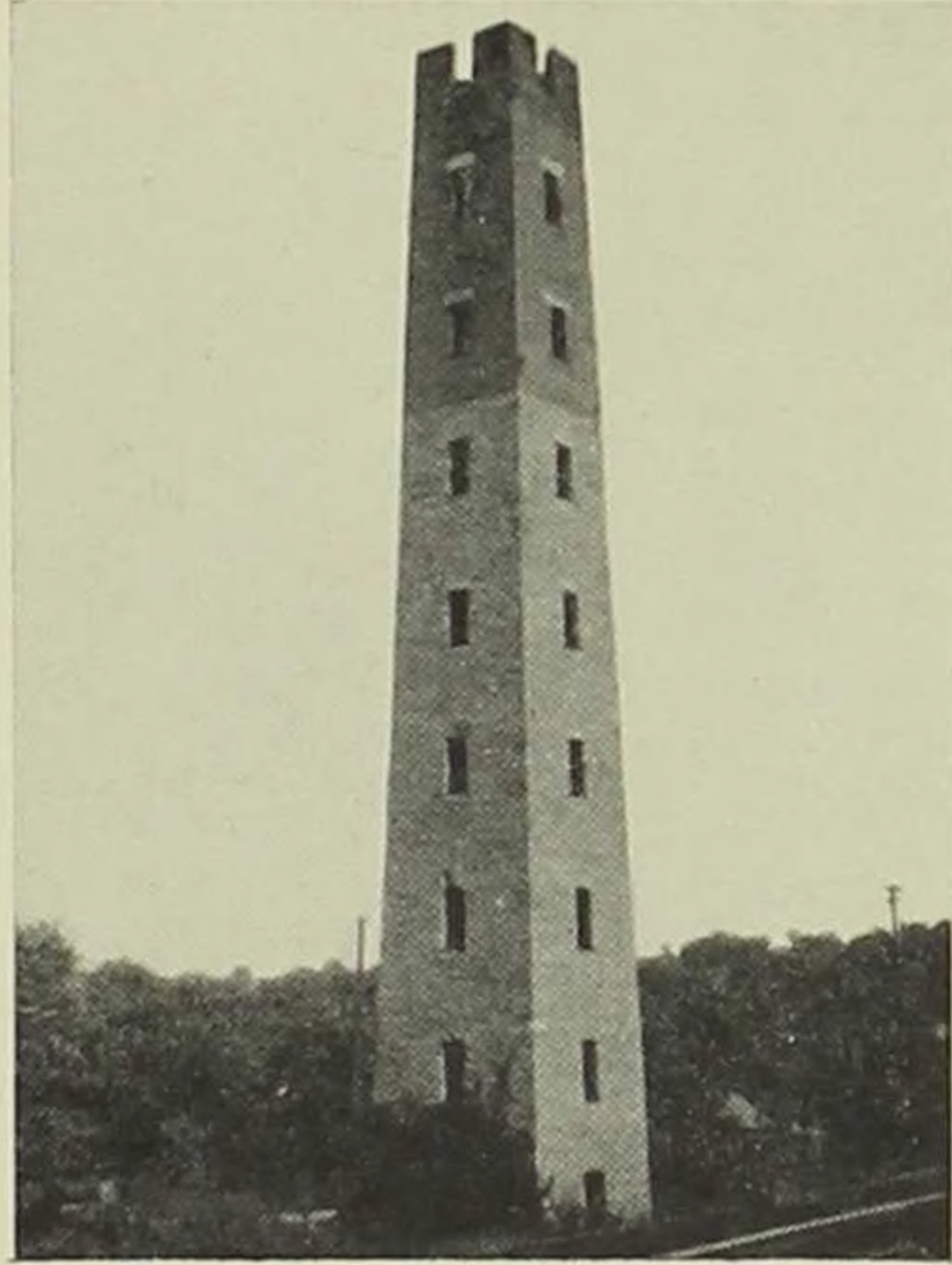
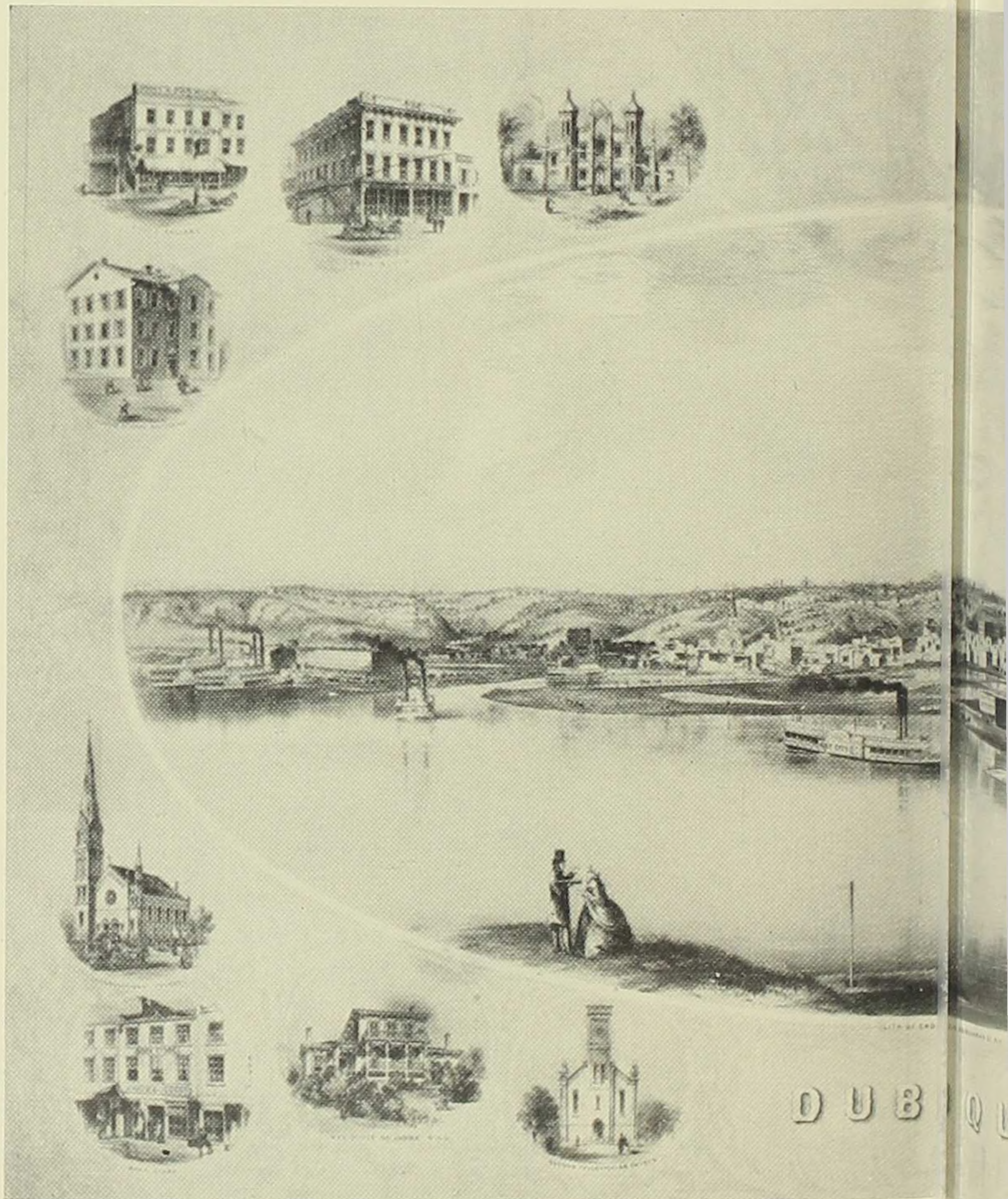
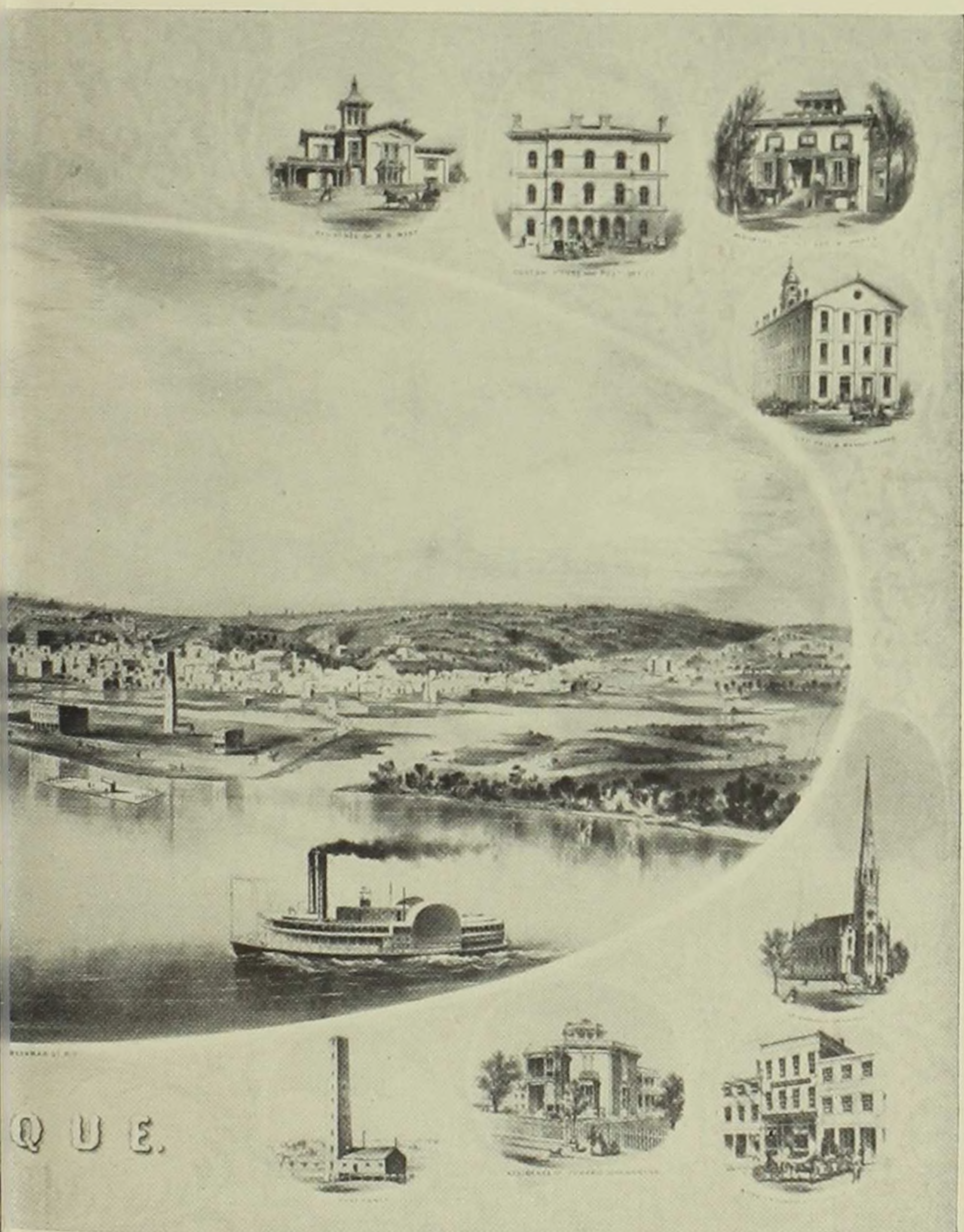


PHOTO BY WILLIAM J. PETERSEN
DUBUQUE SHOT TOWER



Buildings Listed Clockwise from bottom right: Second Presbyterian Church; Residence of Judge King; Book Store; Congregational Church; Public School Building; Root's Gallery; Jones Block; City High School. Boats identified: Pembina, Canada, Grey Eagle, Key City, Hawkeye State.

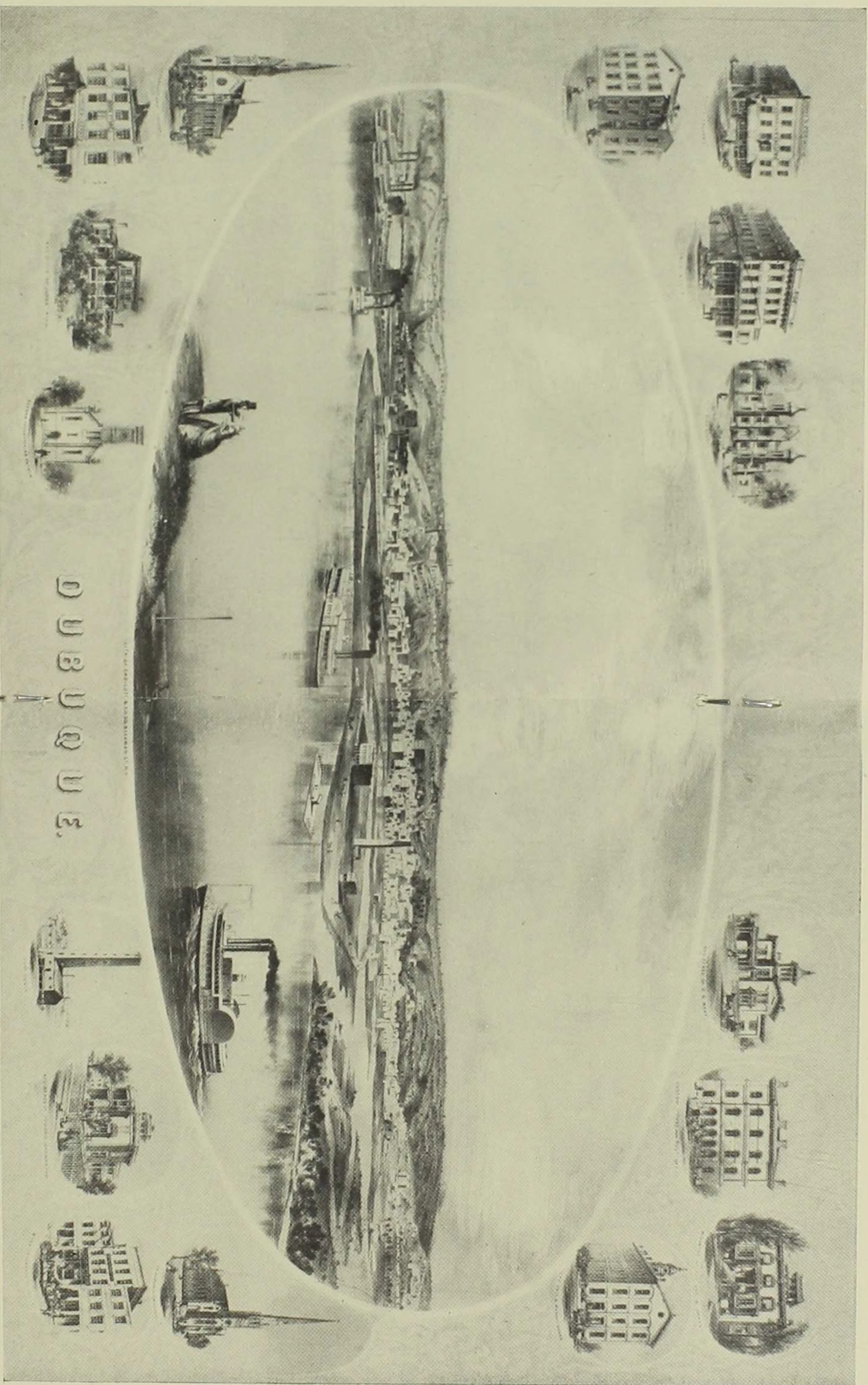
LITE
Buildi
Custo
Hall
Office



BUR
Q U E.

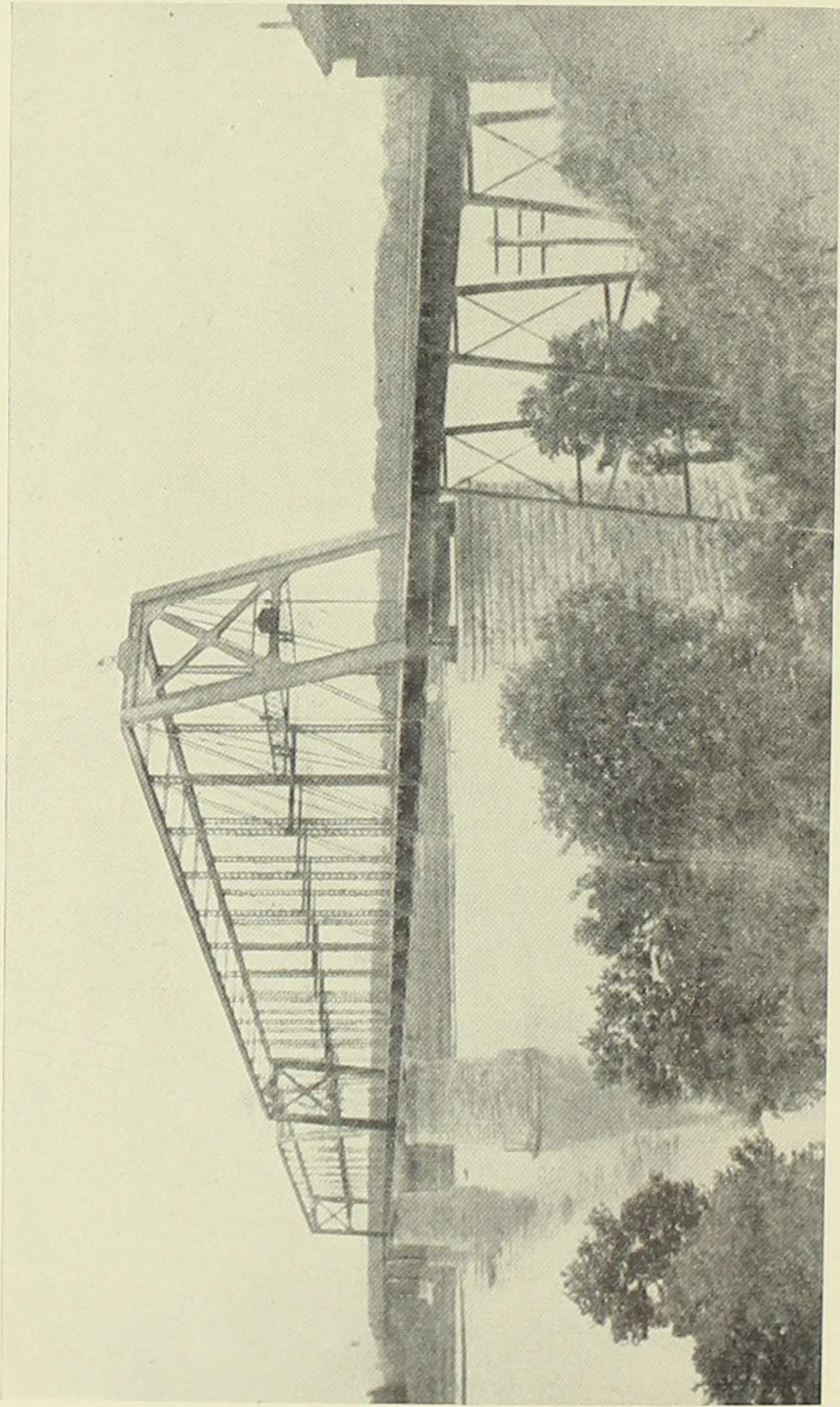
LITHOGRAPH BY ENDICOTT & CO. IN THE LIBRARY OF THE STATE HISTORICAL SOCIETY.

Buildings Listed Clockwise from top left: Residence of R. S. West; Custom House and Post Office; Residence of Gen. Geo. W. Jones; City Hall and Market House; St. Raphaels Cathedral; Aetna Insurance Co. Office; Residence of Edward Langworthy; Shot Tower.



Buildings Listed Clockwise from bottom right: Second Presbyterian Church; Residence of Judge King; Book Store; Congregational Church; Public School Building; Root's Gallery; Jones Block; City High School. Boats identified: Pembina, Canada, Grey Eagle, Key City, Hawkeye State.

LITHOGRAPH BY ENDICOTT & CO. IN THE LIBRARY OF THE STATE HISTORICAL SOCIETY.
Buildings Listed Clockwise from top left: Residence of R. S. West; Custom House and Post Office; Residence of Gen. Geo. W. Jones; City Hall and Market House; St. Raphael's Cathedral; Aetna Insurance Co. Office; Residence of Edward Langworthy; Shot Tower.



COURTESY BEN HUR WILSON

PLATTSMOUTH BRIDGE FROM NEBRASKA SIDE

"It is certainly a source of regret," stated the *Burlington Hawk-Eye*, "that circumstances prevented the attendance of our talented townsman, A. T. Hay, Esq., at the 'opening' of the famous Hay steel bridge over the Missouri at Platts-mouth. Without him the exercises were like the play of Hamlet with Hamlet omitted."

Afterwards, the long wooden trestle approaches at both ends were gradually filled with earth from the deep cut on the Nebraska side of the river. The bridge continued in service until the close of the century, when heavier motive power on the rails made its replacement with a stronger structure imperative. The new bridge was built in 1903, and the two 400-foot spans of the old one removed and re-erected over the Des Moines River in Marion County on the Oskaloosa "branch" of the Burlington which connected with the Albia-Des Moines line at Tracy. One 200-foot span was shortened to 175 feet and erected over the West Fork of the Grand River near Albany, Missouri, in 1907, and is still in service.

Upon the abandonment of the Albia-Des Moines line by the Burlington, the bridge was acquired as a freight cut-off and operated by the Minneapolis and St. Louis Railroad until their grade across the Des Moines "bottoms" was washed out by the great flood of 1947. Business

on the line was not sufficient to warrant the cost of replacing the grade, and so application has been made to the Interstate Commerce Commission for permission to abandon the "branch."

In the event this permission is granted, unless steps are immediately taken to save it, one of America's historic bridges will soon be sold and dismantled for scrap steel. Only a short time ago, engineers tested the structure for deterioration, and every member of it rang as true, under the test hammer, as the day it was built. So impressed were the engineers by this performance, that samples were cut from the sloping end members, to be tested in the laboratories in order to determine "what manner of steel" could thus withstand the ravages of time. This alone is, indeed, proof of the remarkable quality of the "Hay Steel" process, and the inventive genius of the man whose brains and ingenuity made it possible.

BEN HUR WILSON