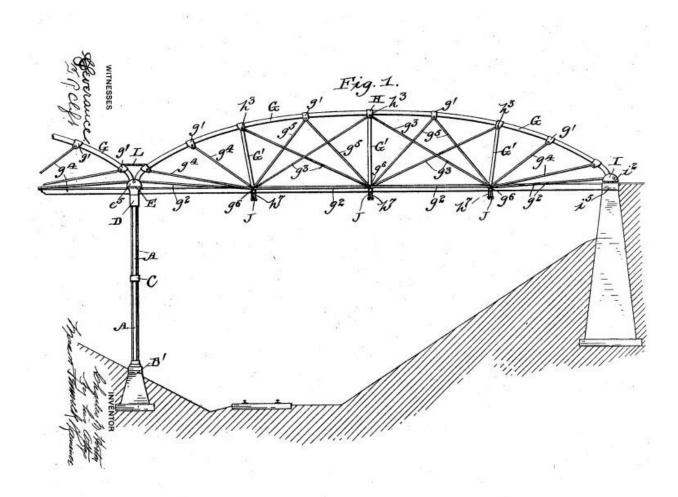
Charles M. Horton: Bridge Builder

On July 23, 1915, some men employed by a local farmer were cutting wooden poles along the bank of the Flatrock River, just northwest of Columbus, Indiana, when they made a gruesome discovery. In a small slough, underneath some large tree limbs, was the body of a man. It was so badly decomposed that the head and lower jaw fell off when the county coroner moved the body. The body was found near the Cornbrook train station, and an unused train ticket was found in the man's pocket. Also found in his pockets were money order receipts that the coroner traced to C. M. Horton of Indianapolis, Indiana, who had been missing since July 3rd.¹

Charles M. Horton had briefly lived in La Crosse at the turn of the century, and he left behind some unique historical artifacts on the landscape of La Crosse County.



United States Patent No. 595,629 C. M. Horton, Truss and Bridge 1897 December 14 Charles M. Horton was born in Canadagua, New York, to Andrew J. Horton and Louisa H. (Slover) Horton.² His father was a blacksmith.³

His exact date of birth is uncertain because early census records do not even come close to agreement. The 1860 census shows that he was born in about September 1859.⁴ The 1900 census, however, shows that Charles Horton was born in August 1850 in New York, and he was 49 years old in June 1900.⁵ The 1910 census recorded his age as 54, which would make his birth year about 1856. His name was recorded as "Clarence" rather than Charles, but the names of his wife and children confirm that it is the same person from the other two census records just mentioned.⁶

We know very little about his early life until his marriage to Theresa Stone on June 1, 1893, in Superior, Wisconsin. Theresa was born in Pittsfield, Massachusetts, to John and Olive (Bastanella) Stone. At that time, Charles Horton indicated that he was working as a machinist.⁷

Theresa's date of birth also varies by source. Her death certificate has May 11, 1865, as her date of birth (and in Springfield, rather than Pittsfield).⁸ Her gravestone, however, shows 1861 as her year of birth.⁹

In the 1890's, Charles Horton was living in Duluth, Minnesota, where he was a bridge builder. In August 1897, he appeared before the Duluth city council to defend the design of a bridge already in place in West Duluth and bid on the Lester River bridge project. One of the councilmen claimed that "five engineers had condemned Horton's bridge." While Horton admitted that the West Duluth bridge had some flex in it because of the loads going over it, he maintained that the bridge had not settled or gave way. Nevertheless, Horton lost the bid on the Lester River bridge contract by a split vote. 10

Horton secured several patents from the United States Patent and Trademark Office. In July 1897, he was awarded a patent for a building strut or column. Horton also patented a "truss and bridge" in December of that year. His novel design featured arched top chord beams and minimized the use of rivets and bolts because Horton thought holes in the steel reduced the structural strength of a bridge. Instead, his bridge relied on "... splicing and supporting sleeves, hangers, hook-clips, socket-supporters ..." Horton maintained that his bridge could be assembled quickly and easily, without expensive machinery and tools, at a lower cost. He followed that up with another bridge patent in early 1899. Although it looked more like other bridges being built at the time, the design avoided perforating the steel "... as much as possible, as the perforation of the metal tends greatly to weaken the same." Another patent related to his bridge building business was granted in 1900 for a rolling mill "... for rerolling beams or girders and connecting plates, so as to join them together to form structural beams, posts, or girders."

In May 1898, Charles Horton was living in Superior, Wisconsin.¹⁶

Horton moved to La Crosse in 1899 and partnered with J. F. McDonough and John A. Elliott to incorporate Horton Bridge and Steel Company with \$25,000 in capital stock. Among the stockholders were William Torrance, a partner in the Torrance steel foundry, and W. J. Solberg & Son Company, a manufacturer of boilers. Horton Bridge and Steel manufactured and sold iron and steel, built bridges, and constructed iron and steel buildings.¹⁷

The company made successful bids for several bridge projects in Wisconsin and in at least one other state. By July 1899, Horton had a contract to build three steel bridges in La Crosse County. Another was for an iron bridge in the township of Cassville. The cost of two stone abutments, the iron bridge,

and planks for the bridge deck in Cassville totaled \$608.²⁰ Horton Bridge and Steel also won eleven contracts in Indiana in early 1900.²¹ At the end of 1900, Horton Bridge and Steel was awarded a \$3,360.24 contract to build two more iron bridges in La Crosse County to replace wooden ones that had been washed away in a big flood.²²

Horton also made news in October 1899 when he claimed there was a large vein of iron ore running from Mindoro, in northern La Crosse County, all the way down to Westby in Vernon County.²³

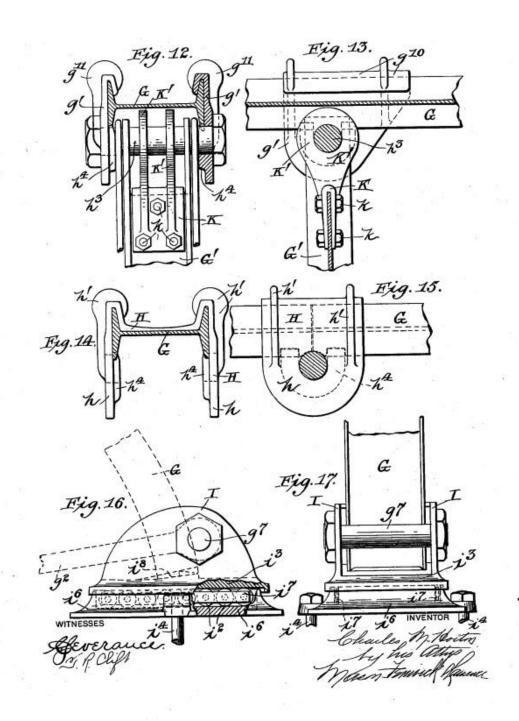
Charles and Theresa Horton were renters at 509 South 9th Street in La Crosse with their two children, five-year-old Dean, and three-year-old Louisa.²⁴

In the summer of 1900, construction of a Horton Bridge company facility near the W. J. Solberg & Son location was underway. Because the company had plenty of work already lined up, Horton paused bidding for new projects while their factory was being built.²⁵ Reliance Steam Boiler Works, owned by William J. and L. J. Solberg was at 401-403-405 Mill Street (now Copeland Avenue).²⁶ The new factory for Horton Bridge and Steel opened on August 29, 1900. It was going to be busy because the company expected to construct 25 to 35 new bridges by the end of that year.²⁷ The lumber industry was declining at the turn of the century in La Crosse, so this new business, along with a couple of others, was welcomed as an antidote to inactive sawmills.²⁸

Just months after the new facility opened, there were rumors that an even larger Horton Bridge and Steel factory would be constructed on the north side of La Crosse the following spring because the recently-constructed factory was not large enough.²⁹ In its 1900 annual report, the La Crosse Board of Trade called Horton Bridge and Steel ". . . very successful, and is contemplating to greatly enlarge its plant to meet the demands for its work."³⁰

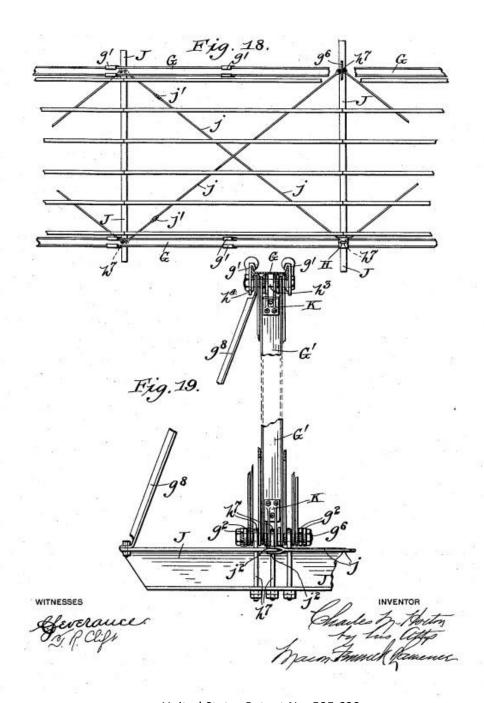
Instead of building a new factory the following spring, the company underwent a total reorganization in April 1901. Charles Horton resigned as president and director of Horton Bridge and Steel, which changed its name to La Crosse Bridge and Steel. There was a public offering of an extra 1500 shares at \$100 each to finance the construction of a new foundry and construction plant.³¹ (This new plant apparently never came to fruition.) The stockholders elected William Torrance as president, J. F. McDonough as vice president, F. E. Cutler as secretary, and John A. Elliott as treasurer. Charles Horton sold all his rights to La Crosse Bridge and Steel in exchange for royalties from the company.³²

La Crosse Bridge and Steel had the same officers in 1903 as it did in 1901. The city directory shows its location as 112-114 Jay Street,³³ but that was the location of William Torrance's business, John Torrance and Son foundry.³⁴



United States Patent No. 595,629 C. M. Horton, Truss and Bridge 1897 December 14

William Torrance was elected mayor of La Crosse in 1903 and re-elected for another term from 1905-1907.³⁵ Soon after Torrance became mayor, he reduced his role in the bridge company, and J. F. McDonough became the president of La Crosse Bridge and Steel. McDonough remained the president until the company went out of business in 1915.³⁶



United States Patent No. 595,629 C. M. Horton, Truss and Bridge 1897 December 14

When Charles Horton left La Crosse in 1901, he was supposedly headed to Montana to establish a branch office, and then he would be going to Canada to do the same.³⁷ Another newspaper reported that Horton was going to establish a bridge construction company in Vincennes, Indiana.³⁸

Horton lived in Peru, Indiana, until moving to Indianapolis in about 1907.³⁹ In the 1910 census, Charles and Theresa Horton, were living in Indianapolis, Indiana, with their now-teenage son and daughter.

Charles Horton gave his occupation as contractor/builder. 40 In the last years of his life, Horton was described as a traveling salesman who claimed both Chicago and Indianapolis as his home. 41

The same year that the La Crosse Bridge and Steel company went out of business, Charles M. Horton, who had been the founding father of the enterprise, died under puzzling circumstances in Indiana. At 9:00 a.m. on July 3, 1915, Charles Horton suddenly left his home in Indianapolis without even saying goodbye to his family. They never saw him alive again.⁴²

When his body was found beside the Flatrock River on July 23, it was identified by using the money order receipts found in a pocket. Other pocket contents were a dime, a nickel, a blank sheet of paper, and a button hook used for fastening the buttons on the shoes worn by the deceased man. The big surprise came when Horton's body was moved to reveal a .38-caliber pistol underneath it. One of the six rounds had been fired, and the back of Horton's skull had a hole in it.⁴³

The coroner, Dr. L. E. Bracken, and police thought they had a murder case. The bullet had entered the right side of the head and came out behind the left ear. They believed it would have been difficult for the victim to have shot himself in the back of the head and have the gun come to rest under his body. They were also suspicious of the way the body was positioned in the bushes and tree limbs.⁴⁴ Bracken also noted a bone-crushing wound *above* the bullet hole.⁴⁵

In the beginning, the family insisted it had been a suicide. Deane Horton said his father had been in bad health for two years and was being treated by a physician in Columbus. Charles Horton owned a revolver, but the newspaper reports did not definitively identify the gun found as Horton's. ⁴⁶ There were indications that the Horton house was not a happy home. His son said Charles was a nervous man who did not talk much at home, ". . . and we did not talk to him." Even so, Deane Horton said there was no reason for Charles to commit suicide unless he was in debt to the company that employed him. ⁴⁷ By contrast, his widow said that Charles had been successful in business. She soon changed her mind and thought her husband had not killed himself. ⁴⁸

Further investigation, however, was not possible because the men who retrieved the corpse thought the coroner's work was done, so they took the body directly to the cemetery and buried it. Dr. Bracken believed Horton had been murdered but had no clues as to who had done the deed. His conclusion: "Charles M. Horton came to his death as the result of a bullet wound at the base of the brain, said wound being inflicted by some unknown hand." There were no further news articles about this case.

Even though Charles Horton died over a century ago, his unique ideas for bridge construction can still be seen in La Crosse County.

The La Crosse Bridge and Steel Company erected five steel bowstring arch truss bridges along the McGilvray Bottoms Road, just north of Holmen and New Amsterdam, to replace wooden bridges that had rotted. The steel bridges were constructed from 1905 through 1908 using Charles Horton's 1897 patent. These bridges are now on the National Register of Historic Places and the Wisconsin State Register of Historic Places.⁵⁰

Ironically, these historic bridges in the Van Loon Wildlife Area were once earmarked for demolition by the Department of Natural Resources. Concerned citizens petitioned the Wisconsin Legislature in the 1990s to save the bridges, and The Friends of McGilvray Road, Inc. was established to spearhead

preservation and restoration.⁵¹ Thanks to their efforts, people can see, together in one place, five of the only six Horton bridges that remain in Wisconsin.⁵²

Bridges 1, 2, 3, 4, and 6 on the Old McGilvray Bottoms Road are Horton bowstring arch truss bridges. Bridge 5 is a different design that was moved from Pierce County, Wisconsin, in 1996, to replace a wooden bridge that had previously been in that location. Bridge 7 (not a Horton bridge) spanned the Black River and was dismantled in 1954.⁵³ The only remnants of Bridge 7 are some portions of the concrete piers.

All the Horton bridges exhibit the unique designs of his 1897 patent.

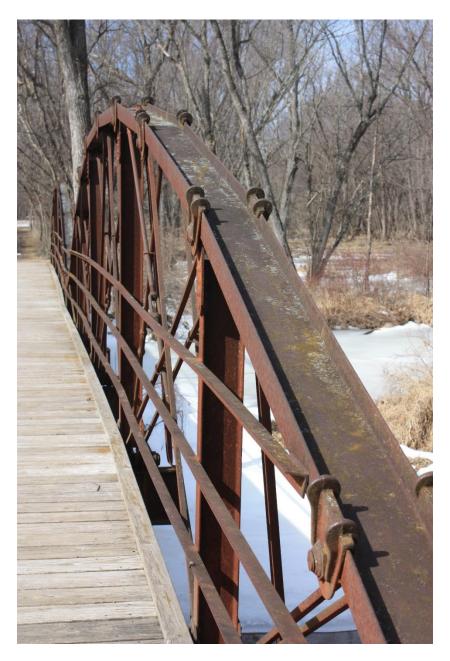
- A single rolled beam for the top chord
- Hook clips grip the top chord
- ID number on each clip indicating its size
- Two additional diagonals added to the traditional single diagonal in each side panel
- Verticals are angled and not exactly vertical
- Bottom chord connected by a traditional riveted pin plate to the verticals
- Floor beams are attached with U-bolts 54



Bridge 1

Each span shows the distinctive bowstring shape

(Photo by Jeff Rand, 2023 March 8)

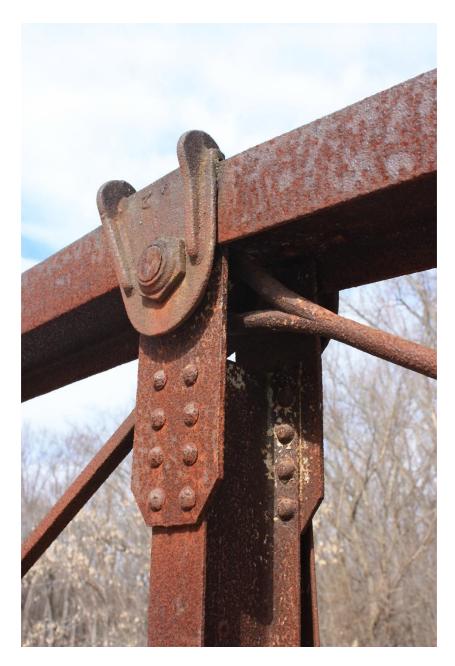


Single rolled beam for the top chord (Bridge 1, photo by Jeff Rand, 2023 March 8)



Clips gripping the top chord

(Bridge 2, photo by Jeff Rand, 2023 March 8)



Clips to secure the verticals to the top chord (Bridge 1, photo by Jeff Rand, 2023 March 8)



Underside of a clip attaching diagonal supports

(Bridge 1, photo by Jeff Rand, 2023 March 8)



Number on the clip indicates its size

(Bridge 1, photo by Jeff Rand, 2023 March 8)

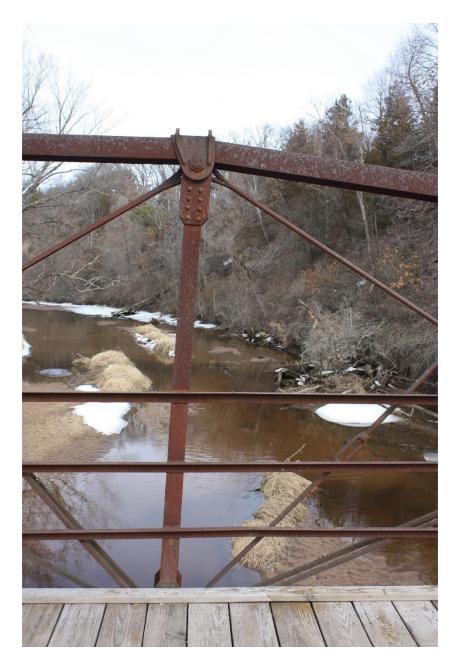


Extra diagonals in each section

(Bridge 1, photo by Jeff Rand, 2023 March 8)



Adjustable turnbuckle on a diagonal support (Bridge 2, photo by Jeff Rand, 2023 March 8)



Vertical supports that are not exactly vertical (Bridge 1, photo by Jeff Rand, 2023 March 8)



U-bolt connections to the deck beam

(Bridge 1, photo by Jeff Rand, 2023 March 8)

If you take a stroll through the Van Loon Wildlife Refuge, over creeks, sloughs, and marshland, pause to appreciate the ingenuity and workmanship of these historic structures that have lasted for over a century. With some care, they can probably last for another century. This is the legacy of bridge builder Charles M. Horton.

Jeff Rand La Crosse Public Library, Retired

Sources & notes:

- ⁴ 1860 U.S. census, Yates Co., New York, pop. sch., dwell. 276, fam. 258, Andrew J. and Lois H. Horton.
- ⁵ 1900 U.S. census, La Crosse County, Wisconsin, population schedule, La Crosse City, p. 9B, dwelling 189, family 210, Charles M. and Teresa Horton; image, *AncestryHeritageQuest.com* (http://www.ancestryheritagequest.com: accessed 2023 March 8); citing NARA microfilm publication T623, roll 1795.
- ⁶ 1910 U.S. census, Marion County, Indiana, population schedule, Indianapolis City, p. 3A, dwelling 59, family 62, Clarence M. and Tressie Horton; image, *AncestryHeritageQuest.com* (http://www.ancestryheritagequest.com: accessed 2023 March 8); citing NARA microfilm publication T624, roll 366.
- ⁷ "Wisconsin Marriages, 1836-1930," Charles M. Horton, 1893.
- ⁸ Marion County, Indiana, death certificate no. 37377 (1942), Theresa Horton; Marion County Register of Deeds, Indianapolis. Springfield and Pittsfield are 54 miles apart.
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- ¹⁰ "Lester River Truss," *The Labor World* (Duluth, Minnesota & Superior, Wisconsin), 1897 August 21, p. 1. It should be noted that there was a Horace E. Horton Bridge Company based in Rochester, Minnesota, that also built bridges in Wisconsin in the 1880s.
- ¹¹ "New Minnesota Patents," *The Minneapolis Journal*, 1897 July 24, p. 2.
- ¹² "Patents Issued," *The Saint Paul Globe*, 1897 December 19, p. 12.
- ¹³ "Google Patents," digital images, *Google* (<a href="https://patents.google.com/patent/US595629A/en" : accessed 2023 March 9), C. M. Horton, truss and bridge, patent file no. 595,629 (1897). Horton's patents have expired, so they are not found on the United States Patent and Trademark website. The bridges on the McGilvary Road trail in La Crosse County use this design.
- ¹⁴ "Google Patents," digital images, *Google* (https://patents.google.com/patent/US621672A/en?oq=621%2c672 : accessed 2023 March 9), Charles M. Horton, bridge construction, patent file no. 679,672 (1899).
- ¹⁵ "Google Patents," digital images, *Google* (https://patents.google.com/patent/US642449A/en : accessed 2023 March 9), C. M. Horton, rolling mill, patent file no. 642,449 (1900).
- ¹⁶ "Google Patents," Charles M. Horton patent file no. 679,672 (1899).
- ¹⁷ Wisconsin Department of Transportation, *Historic Highway Bridges in Wisconsin, Volume 2, Part 1, Truss Bridges* (Madison, Wisconsin: Wisconsin Department of Transportation, 1998), 102; digital images, Google Books (https://www.google.com/books/edition/Historic Highway Bridges in Wisconsin pt/WCr2S5zYATwC?hl=en&gbpv=1">https://www.google.com/books/ed
- ¹⁸ "Forty Years Ago," La Crosse (Wisconsin) Tribune, 1939 July 22, p. 4.
- ¹⁹ The Bloomington (Wisconsin) Record, 1900 September 27, p. 4.
- ²⁰ The Times Review (Fenimore, Wisconsin), 1900 November 21, p.12, c. 3.
- ²¹ "Minnesota," *The Saint Paul Globe*, 1900 May 25, p, 4. This article states that the C. M. Horton Bridge company had a contract to build "the large highway bridge" at Onalaska [Minnesota?], as well as the Indiana projects.
- ²² "Build Iron Bridges," The Intelligencer (Viola, Wisconsin), 1900 December 21, p. 8.
- ²³ Joseph K. Kidder, "Sale Of Morning Newspaper Was Subject Of Discussion In 1899," *La Crosse (Wisconsin) Tribune*, 1959 October 11, p. 10.
- ²⁴ 1900 U.S. census, La Crosse Co., Wisconsin, pop. sch., p. 9B, dwell. 189, fam. 210, Charles M. and Teresa Horton.
- ²⁵ "Takes No More Contracts," La Crosse (Wisconsin) Morning Chronicle, 1900 June 13, p. 3, c. 1.

¹ "Body Was That of C. M. Horton," *The Republic* (Columbus, Indiana), 1915 July 14, p. 1.

² "Wisconsin Marriages, 1836-1930," database, *FamilySearch* (https://familysearch.org/ark:/61903/1:1: XRL4-NKN: 30 January 2020), Charles M. Horton, 1893.

³ 1860 U.S. census, Yates County, New York, population schedule, Italy township, p. 31, dwelling 276, family 258, Andrew J. and Lois H. Horton; image, *AncestryHeritageQuest.com* (http://www.ancestryheritagequest.com: accessed 2023 March 8); citing NARA microfilm publication M653, roll 885.

- ²⁶ Philippi's Souvenir Directory of the City of La Crosse Comprising An Alphabetical List of Names . . . (La Crosse, Wisconsin: L. P. Philippi Co., 1900) 436, for "Solberg, Wm. J. & Son. Thanks to Jenny DeRocher of the La Crosse Public Library Archives Department for the street name clarification. The Horton Bridge factory would have been just southwest of where the railroad tracks cross under Copeland Avenue. This area is now vacant.
- ²⁷ "Factory Starts Up," La Crosse (Wisconsin) Morning Chronicle, 1900 August 30, p. 3, c.1.
- ²⁸ "Twenty Years Ago Today," La Crosse (Wisconsin) Tribune, 1920 November 19, p. 3.
- ²⁹ "May Build A Factory," La Crosse (Wisconsin) Morning Chronicle, 1900 December 30, p. 5, c. 3.
- ³⁰ Thirty-third Anniversary of the Board of Trade of the City of La Crosse Wis. and Annual Report for the Year 1900 (La Crosse, Wisconsin: Republican and Leader Print, 1901), 12; digital images, University of Wisconsin-La Crosse Murphy Library Digital Collections

 $\frac{https://digitalcollections.uwlax.edu/jsp/RcWebImageViewer.jsp?doc\ id=0c3418f3-98b9-4a8e-918b-8fa31fbb4f56/wlacu000/0000009/00000050: accessed 2023 March 14).$

- ³¹ "Twenty Years Ago Today," *La Crosse (Wisconsin) Tribune*, 1921 April 12, p.3. This factory was apparently not built.
- ³² Joseph K. Kidder, "Cracker Barrel News-60 Years Ago," La Crosse (Wisconsin) Tribune, 1961 April 23, p. 11.
- ³³ Philippi's Directory of the City of La Crosse Comprising An Alphabetical List of Names . . . (La Crosse, Wisconsin: L. P. Philippi Co., 1903) 275, for "La Crosse Bridge & Steel Co."
- ³⁴ "William Torrance, Formerly Mayor, Dies At Hospital," La Crosse (Wisconsin) Tribune, 1934 January 22, p. 1.
- 35 "William Torrance, Formerly Mayor, Dies At Hospital," La Crosse (Wisconsin) Tribune, 1934 January 22.
- ³⁶ Wisconsin Department of Transportation, *Historic Highway Bridges in Wisconsin, Volume 2, Part 1, Truss Bridges,* 104. The last city directory listing for La Crosse Bridge and Steel is in 1915. Its address is the residence of J. F. McDonough at 812 Cass Street.
- ³⁷ "Horton Will Go West," La Crosse (Wisconsin) Daily Press, 1901 April 30, p. 7.
- ³⁸ "Oldest Woman Settler," The Minneapolis Journal, 1901 May 24, p. 16.
- ³⁹ "Body Was That of C. M. Horton," *The Republic* (Columbus, Indiana), 1915 July 14.
- ⁴⁰ 1920 U.S. census, Marion County, Indiana, pop. sch., p. 3A, dwell. 59, fam. 62, Clarence M. and Tressie Horton.
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- ⁴² "Body Was That of C. M. Horton," The Republic (Columbus, Indiana), 1915 July 14.
- ⁴³ "Body Was That of C. M. Horton," *The Republic* (Columbus, Indiana), 1915 July 14.
- ⁴⁴ "Body Was That of C. M. Horton," *The Republic* (Columbus, Indiana), 1915 July 14.
- ⁴⁵ "Verdict Holds Death Was Result Of Wound," *The Republic* (Columbus, Indiana), 1915 July 27, p. 8.
- ⁴⁶ "Body Was That of C. M. Horton," The Republic (Columbus, Indiana), 1915 July 14.
- ⁴⁷ "Verdict Holds Death Was Result Of Wound," The Republic (Columbus, Indiana), 1915 July 27.
- ⁴⁸ "Body Was That of C. M. Horton," *The Republic* (Columbus, Indiana), 1915 July 14. This newspaper article identifies "Mrs. Lola Horton" as Charles's widow. Mrs. Horton was Theresa, so the report may be referring to their daughter, Louisa.
- ⁴⁹ "Verdict Holds Death Was Result Of Wound," *The Republic* (Columbus, Indiana), 1915 July 27. A search of the "Birth, Marriage, & Death, Indiana Death Index, 1882-1920" on FamilySearch yielded no relevant results.
- ⁵⁰ Linda McMullin., "The McGilvray 'Seven Bridges Road," *Historical Marker Database*, 2012 April 17, https://www.hmdb.org/m.asp?m=54581.
- ⁵¹ Ken Brekke, "Moved to act," La Crosse (Wisconsin) Tribune, 1997 March 30, p. E1.
- ⁵² "Horton Covered Bridge: Amicon Falls State Park," *Wisconsin Department of Natural Resources*, accessed 2023 March 7, https://dnr.wisconsin.gov/topic/parks/amnicon/bridge. The sixth surviving Horton bridge is the covered bridge in Amicon Falls State Park near Superior, Wisconsin.
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- ⁵⁴ Nathan Holth, "McGilvray Road Bridge Number 1," *HistoricBridges.org*, accessed 2023 March 14, https://historicbridges.org/bridges/browser/?bridgebrowse.