

**ADDITIONAL NOTES ABOUT THE CHAIN BRIDGE AND THE
SURROUNDING AREA**

WHO LIVED IN THE TOLL HOUSE?

Let's look at the information that we can gather from some of the censuses which show quite a bit geographical, economic and social mobility for the inhabitants of the toll house. While the information is a bit sparse, no doubt partly due to the rather remote location of the site especially in the nineteenth century, we can gather some idea about the lives of some of the bridge toll collectors.

Relying on the 1860 map of Northampton County, in the immediate vicinity of the toll house on the east shore of the Lehigh River, we can see that there was a cluster of buildings to the immediate south of Lehigh Gap in the vicinity of the toll house, including what was known as the lower Lehigh Gap hotel. About ¼ mile south of the chain bridge there was lock tender for the Lehigh Canal's guard lock #3 at dam #3. And a little further south, there was a lockkeeper's house at lock #22. A short way to the north of the toll house, maybe another ¼ of a mile, there was another inn, and then there was also a building identified as Reuben Smith's store.

Looking at the earliest censuses (1820, 1830, 1840), about all that we can determine is that the Bauman family was living in this area (Lehigh Township, Northampton County).

According to the 1850 census, Robert Drake, age 25, married to Sarah, age 21, was the toll collector. Ten years later, in the 1860 census, Robert Drake, age 35, was still married to Sarah, age 31, but he was now a merchant in Slatington with four children (Thomas 1854, Fillmore 1855, James 1858 and Martha 1860). In the 1870 census, Robert Drake, age 45, still married to Sarah, age 41, was now a slate dealer in Allentown with four children. He owned real estate with an approximate value of \$4500. Robert died in 1878 (age 53) and was buried in Akron, Ohio. In the 1880 census, Sarah Drake, widowed, age 56, was living in Akron, Ohio with son Thomas, age 26 (a slate man) and son James, age 21 (also a slate man). Sarah was still alive in Akron in 1900, living with her daughter Martha's family. Sarah Drake died in 1907 at the age of 83. The family had moved to Akron in 1873, and coming from a slate industry background, all three sons had gone into the slate business. By 1907, all three sons were deceased.

I could not find any toll collector listed in either the **1860** or the **1870 census**.

According to the 1880 census, Daniel Shirer, age 19, married to Louisa, age 17, was the toll collector. He remarried Medora Kautz (1858-1932) in 1884 in Scranton with three children (Charlotte 1886, Thomas 1888 and William 1893). In 1900 he was still living in Scranton as a shoemaker, and in 1910 he was in Dunmore, PA (a suburb of Scranton) as a painter. The 1920 Dunmore census shows William as a molder with Medora, his mother, and the 1930 census indicated that Medora was widowed. Evidently, Daniel Shirer died in 1928 in Orlando, Florida. Medora died in 1932 in Clarks Summit near Scranton. The fate of Daniel Shirer's first wife, Louisa, is unknown.

According to the 1900 census, Tillie Pehle, age 26, unmarried was the only female toll collector that I could find in my research. She lived with her older sister, Amelia Pehle, age 29, also single, a tailoress. Going back in time, the 1880 census of Western Lehigh Township shows the family of Charles Bahle, 56, a shoemaker from Prussia, with his wife Emillia, age 44, and daughters Emillia, age 19, and Matilda, age 14. Tillie died in 1904 and was buried in Lower Towamensing Cemetery (30 Mar 1867 – 23 Mar 1904). In the 1910 census, Amelia Pehle, is listed in Washington Township, probably Slatington, as a boarder, age 49, and working as a tailor in a clothing store. In the 1920 census, she was living in Lehighton, PA as a tailoress with her own local shop. In the 1930 census, Amelia, age 62, was a boarder living with Ellen Brinkman, a widow related by a cousin, and working as a tailor. Amelia (1 January 1860 -25 March 1939) died in Lehighton.

According to the 1910 census, Charles Berger, age 62, married for 35 years, born in PA, was the toll collector. From the census we can also see that the house was rented. He was married to Emma L[ydia] Berger, age 51, who was also born in Pennsylvania and who gave birth eight times with four children still alive (Floyd 1889, single, a canal boatman; Daniel 1873, single, laborer odd jobs; James 1871, single, carpenter in Slatington; Minnie 1876, married). According to the earlier 1900 census for the East Penn District of Carbon County, Charles Berger, was a wood chopper. Further back, the 1880 census of Lower Towamensing district in Carbon County, which included the Lehigh Gap area, indicated that Charles was a distiller of wintergreen oil. The 1920 census showed Charles and Lydia were living on Hazard Road in Palmerton with their sons Daniel and Floyd. Lydia died of the flu while living in Palmerton in 1920. Charles died in 1939 in Bowmanstown at the age of 91. Both were buried in Bowmanstown, PA.

According to the 1920 census, Richard Hauser (1878-1926), age 42, was living in the toll house, but he was listed as a laborer at Coplay Cement company not as the toll collector. The 1941 obituary for his wife, Annie Hauser, nee Gruber (1881-1941), married in 1901, and the death certificate for Richard Hauser indicated that he was actually the toll collector. His wife lived at Lehigh Gap until about 1929. The 1900 and 1910 censuses indicated that Richard was a cement company laborer, and that the family included three daughters (Eva, Mary, Mildred) and a son (William). In the 1930 and 1940 censuses, Annie Houser was listed as a servant/housekeeper in Moore township, Northampton County. They were buried in Coplay, PA.

According to the 1930 census, Lester Christman, age 25, was the toll collector, with his wife, Mildred, age 23, and two daughters and a niece. The 1910 census showed Lester Christman living in Lower Towamensing township as a laborer (odd jobs). The 1940 census showed him living in Moore township, Northampton County with two sons and working as a laborer on road work. His obituary, 29 December 1988 in *The Morning Call*, identified him as living in Northampton at the time and as having been a maintenance mechanic at Mack Trucks for 23 years before retiring in 1967. He was born in Little Gap.

So, what can we learn from this census information?

First, I'd like to point out that we have only sporadic information about the men and women who served as toll collectors over the one-hundred-year existence of the toll bridge (only six people). Looking at the information that we do have from some of the censuses, it seems to me that there was quite a bit of geographical, economic and social mobility.

The job of toll collector does not seem to have been a long-term occupation. Most were in the toll house for only a few years at best.

The toll collectors were either young, just starting out in life, or older, retired from another job. They were almost always married.

It is not surprising that the job of toll collector was a pretty temporary job for most people, and that people used it as a way station until something better came along.

Since we have one documented instance of a woman serving as toll collector, it is probably the case that there were others.

It looks like the toll collector paid rent for the house and probably kept a portion of tolls as part of their salary, but we don't yet have any information on the financial arrangements involved with the job.

The toll collectors and their families exhibited economic mobility and often moved on to all kinds of different occupations in the future.

It is also clear that there were no "qualifications" to be a toll collector since they came from varied backgrounds. It would be interesting to know how they were recruited.

It would also be interesting to know just how many toll collectors there actually were in that 124-year time span of the bridge.

In the 19th century, the area was still pretty isolated and there couldn't have been that much traffic or toll being collected. Nobody was making much money on the bridge, and that meant certainly not the toll collectors.

Given the isolation of the toll house, living there must have been pretty simple. A central wood stove was used to heat the small building, and once the railroad was built, the inhabitants could have gathered spilled coal from the tracks. There is evidence of some springs in the vicinity for water, but the river was right there too. Given the rocky terrain, I am not really sure if there was any level land for any kind of garden.

Toll collecting life must have been pretty boring.

With the appearance of cars and trucks, the isolation of the area did change and the improvement of the roads, meant that there was a lot more traffic across the bridge and increased money flow. The shareholders in the bridge company benefitted from the income, and maybe the toll collector did too.

WHAT ROLE DID JOHN DIETER BAUMAN AND HIS FAMILY PLAY IN THE CONSTRUCTION OF THE CHAIN BRIDGE?

The Bauman family was one of the most important families in the early settlement of Carbon and Northampton counties. Hans Dieter Bauman (1707-1761)—there are many different spellings of the name--emigrated from Germany in 1727. (It can be rather difficult to follow the history of the early Bauman family because of the alternative name spellings but also because of the re-use of the same first names over and over again.) Bauman first settled in Marlborough township (present day Montgomery County) with his friend Nicholas Kern (1693-1749). Kern took out warrants on land south of the Blue Mountain and settled the area that would later become Slatington. In Marlborough township, Bauman built a grist mill along Perkiomen Creek.

Around 1755, Hans Dieter Bauman took out warrants on land along the Lehigh River, north and south of Lehigh Gap. At the time, this area was part of Lower Towamensing Township, Northampton County. Today these lands would be in the same township, the borough of Bowmanstown in Carbon County and Lehigh Township in Northampton County. The Bauman warrants included the land on which the later chain bridge and toll house were erected. In 1761 Hans Dieter Bauman, who had been active during the French and Indian war, died. The following year, his widowed wife, Eve Bauman married Nicholas Kern, combining estates and fortunes.

The second generation of the family centered on the two sons of Hans Dieter Bauman. The two boys both served in the continental army during the American Revolutionary War. After the war, both men “took up lands at twenty-five cents an acre in the region adjoining Towamensing Township in Northampton County and erected saw-mills selling their lumber in Philadelphia.” They floated logs downstream and became quite wealthy.

In 1788 Bernhard Bauman (1749-1824) took out a warrant for 100 acres of land at Lehigh Gap and the present-day site of Palmerton. He built a stone mansion at the Gap for his family of 13. The house was on the south bank of the Aquashicola Creek.

Heinrich Bauman (1751-1824) was a farmer and lumber man who lived about two miles north of Lehigh Gap in the general vicinity of present-day Bowmanstown and western Palmerton. With his wife, Catharine Dreisbach, there were four surviving children: John Dieter Sr. (Big John Dieter), Henry, Anna Mary and Susanna.

Of the third generation of the family, John Dieter Bauman Sr. (Big John Dieter, 1773-1853), the son of Heinrich and the future founder of Bowmanstown, was the most important for the future of the chain bridge. He built a log home on the banks of the Lehigh River and operated a saw mill. His grist mill was on the west bank of the river below the future site of the chain bridge. The water power for the mill was eventually cut off by the building of the Lehigh Canal. Big John Dieter owned land abutting that of his father all along the river up to Parryville.

There was a fourth generation of the Bauman family. Jacob Bowman (1799 -1877) was born in Bowmanstown, the eldest son of Big John Dieter. He started a general store in lower end of Lehigh Gap and also operated a grist mill. In 1808, he built a stone building-- the date stone is set in the west-end gable--to the north of the former chain bridge. Originally built as his home, it was later used as a hotel, the "Anthony," and subsequently as "Tax and Rue's." Jacob also improved the road through the gap before moving to Millport (present-day Aquashicola) where he operated a grist mill.

See the simplified genealogy chart of the early Bauman family.

WHEN WAS THE CHAIN BRIDGE REBUILT AFTER THE 1926 FIRE?

While it took some time to make the final decision to rebuild the bridge, once the rebuilding started, it went very quickly.

In a little over two weeks after the fire, the ruins of the bridge had been cleared, the remaining lumber removed, and the span that had fallen into the river raised.

In early July 1926, an ad was placed for bids to reconstruct the bridge, but the actual decision to rebuild had not yet been decided on by the stockholders as negotiations continued with the state about an offer to buy the bridge, raze it and then build a new bridge. The state offered \$12,500 for the bridge with the costs to be divided between the state and Northampton and Lehigh counties. When Northampton County commissioners balked at the price, the deal fell through.

Even though the state seemed intent on eventually building a new bridge, the directors of the bridge company made the decision to rebuild in April 1927 (**The Slatington News, 22 April 1927; The Morning Call 24 April 1927**). Two new directors were added to the board of the company, Clement E. C. Chase of Philadelphia and F. H. Dechant of Reading. Both of the new directors had engineering, architectural and bridge-building experience.

The rebuild used the old iron-link chains reinforced with three steel cables on each side of the bridge. It is interesting that some of the surviving iron links from the bridge were sent to different parts of the country and the Pennsylvania state highway department for examination and analysis. (**The Slatington News, 29 April 1927**) Trusswork was added on each side of the roadway to make the road surface level and eliminate swaying. Twelve-inch I-beams served as cross beams. The surviving wood frame structure on the center pier was removed. Portions of the bridge were pre-assembled in Philadelphia and then brought to the site for erection.

The chain bridge reopened to traffic at 4 o'clock on 2 June 1927, just a bit over a year after the fire and at a cost of about ten thousand dollars. The maximum load on the bridge increased from 12,000 to 30,000 pounds. Day and night watchmen remained on duty at the bridge to prevent another fire. Tolls remained the same, 5 cents for passenger cars (two people) and ten cents for larger and trucks. (**The Slatington News, 3 June 1927**).

WHAT ABOUT THE ROAD NETWORK IN THE AREA AROUND THE BRIDGE?

The Lehigh Gap Chain Bridge was located at the confluence of three roads. The most important of these roads was on the east side of the bridge. The Lehigh and Susquehanna Turnpike, aka the Berwick and Easton Turnpike, ran from Easton to Bethlehem through Cherryville, Lehigh Gap, Gnadenhutten (now Lehighon) and Mauch Chunk before continuing up to Nescopeck on the Susquehanna River (Nescopeck was across the river from Berwick). In Lehigh County, on the west side of the bridge, there was the Old Mauch Chunk Road which ran from Allentown northwards through Unionville (now Neffs) and then north across the Blue Mountain. This road later re-routed from Neffs through what later became Slatington up to Lehigh Gap. Finally, there was the so-called Mountain Road (based on an old Indian Path) which ran westward from Lehigh Gap towards Saegersville.

Immediately south of Lehigh Gap, at the approximate location of the bridge, was an old ford across the river known as Weider's Crossing.

The bridge became a key link in providing an inter-connecting link between these three roads.

WHAT BRIDGES WERE ACROSS THE LEHIGH RIVER IN 1826?

The Lehigh Gap Chain Bridge was one of the first bridges across the Lehigh River between Mauch Chunk and Easton, a distance of a little more than 46 miles. At the time of its construction, there existed

- The “Biery” bridge (1824) in Catasauqua, which was also a chain bridge constructed like the Lehigh Gap bridge
- The Allentown chain bridge (1812) that was damaged by fire in 1828
- In Bethlehem, there was an uncovered, wooden bridge dating to October 1816.
- The Easton chain bridge (1811)
- Further north, above Lehigh Gap, in 1809 a bridge was built across the river by Jacob Weiss (present-day Weissport).

Thus, before the Lehigh Gap Chain Bridge was erected, in the stretch of the Lehigh River from Siegfried (present-day Northampton) to what later became known as Weissport, a distance of about 15 miles, there was no bridge.

WHAT ABOUT THE CANAL AND RAILROADS IN THE AREA AROUND THE BRIDGE?

The construction of the chain bridge preceded the appearance of railroads and the canal in the immediate area. The building of the Lehigh Canal along the east side of the Lehigh River from Mauch Chunk to Easton began in the summer of 1827 and was completed by June 1829. Canal slack water navigation went underneath the bridge, but the bridge and tollhouse were never part of the canal navigation system.

In 1855, across from the tollhouse on the west bank of the Lehigh River, the Lehigh Valley Railroad began operations between Mauch Chunk and Easton. The railroad had a small station at the Lehigh Gap location to serve a hotel for vacationers. The western approach road to the chain bridge crossed the LVRR mainline at grade just beyond the station.

In 1867, just feet away from the tollhouse itself on the east bank of the Lehigh River, the Lehigh and Susquehanna Railroad began its own operations between Mauch Chunk and Easton. The eastern approach road to the chain bridge crossed the L&S mainline at grade, then passed the tollhouse and went onto the bridge. Just beyond the Blue Mountain, the L&S, which was later leased and operated by the Central Railroad of New Jersey after 1871, operated a small station that served the small community immediately north of Lehigh Gap.

So, while the bridge was in a pretty isolated spot when it was initially built, by the later nineteenth century it was part of a road, railroad and canal transportation hub at the intersection of Northampton, Lehigh and Carbon counties.

WHAT ABOUT POPULATION OF THE AREA AROUND THE CHAIN BRIDGE?

In 1830, the region was still very sparsely populated with Lehigh County numbering only 22,256 and Northampton County - 39,482. With an area of 348 mi² in Lehigh County and 377 mi² in Northampton County, that works out to a population density of about 85 per mi² in the two counties. But much of that population was concentrated in the urban centers of Easton, Bethlehem and Allentown. More specifically, if we look at the populations in the two townships on the east and west side of the Chain Bridge, the population was even lower. The 1830 population density of Lehigh Township, Northampton County, was 1,659 persons / 29.83 mi², or about 55.62 persons per mi². The 1830 population density of Heidelberg Township, Lehigh County, was 2,237 persons / (26.3+23.7) mi², or about 44.74 persons per mi².

WHAT WAS THE AREA LIKE WHEN THE CHAIN BRIDGE WAS BUILT AND, IN THE YEARS, AFTERWARDS?

We've already seen that the population, primarily agricultural by occupation, in the area of the chain bridge was sparse and remained so through the nineteenth century. The bridge was at the intersection of three rather important roads including the Berwick Pike and the later Allentown-Slatington Pike. The bridge was also astride two and later three railroads and a canal, even though it was not directly connected to any of those. It was a natural point for lines of communication to meet.

There are just a few travel accounts with information about the Lehigh Gap area in the early nineteenth century. Most mention the existing Bauman hotel along the Aquashicola Creek, Devil's Pulpit rock formation on the west side of the Gap, and the narrow defile through the gap. For example, in Mrs. Royall's account, published in 1829, she noted that "we arrived at the mountain about 8 o'clock, which we pass not over, but through, at a place called the Gap. A tavern is kept at the Gap...we are engulfed in streams, rocks and mountains (after passing through the gap)." "The whole [area] is environed with wild mountains and huge rocks, some of which, loosened from their places, have rolled down near the road." (Anne Royall, **Mrs. Royall's Pennsylvania or Travel Continued in the United States**, volume 1 (1829), page 124-25) Another account echoed Royall's. "At the Gap we halted at an isolated, but very good inn, kept by a man named Craig ... the mountains on the north side of which are low, rocky, and wooded. A projecting portion is called the Devil's Rock." (Maximilian, Prince of Wied's, **Travels in the Interior of North America, 1832-1834** 1906, part 1, 103, page 51) Finally, a later account was also similar in its details. "At the gap is a hotel and a number of dwellings Opposite this station a chain bridge crosses the river." (H. F. Walling, **Allentown Line. New-York to Harrisburg and the Pennsylvania Coal Regions via Central Railroad of New-Jersey** (1867), page 67)

CONCLUSIONS

The Lehigh Gap Chain bridge was a unique survivor of an innovative bridge design, built, in a rather remote location, in the early nineteenth century.

We have only fragmentary information about the bridge and the occupants of the accompanying toll house who served as the toll collectors

I am hoping that more research will lead to locating further information that might be connected to the Bauman family (key figures in the construction of the bridge), the Craig family (key figures in the later operation of the bridge), official company and stockholder materials and state records.

There are so many questions remaining to be answered, for example:

- How exactly did the toll collection process work?
- How were toll collectors actually compensated?
- Why would anyone would take the job of toll collector?
- How were toll collectors recruited?
- How profitable was the bride to investors?
- Are there any statistics about traffic across the bridge?