



Marker Text

On March 31, 1880, officials of Wabash began experimenting with Charles F. Brush's carbon-arc lights. Four 3,000 candlepower lamps were placed atop the courthouse and used to illuminate the town until September of 1888.

Report

IHB now avoids the use of subjective and superlative terms such as "first," "best," and "most." Such claims are often not verifiable and/or require extensive qualification to be truly accurate. That is the case with this marker's title, "First Electrically Lighted City." Charles F. Brush, inventor of the lighting system used in Wabash,¹ wrote an article in 1905 on the arc lamp.² Brush wrote, "Starting with public street-lighting in Cleveland early in 1879, the central-station idea rapidly took root, and before the end of 1881 lighting stations were in operation in New York, Boston, Philadelphia, Baltimore, Montreal, Cleveland, Buffalo, San Francisco, and several other cities." He does not mention Wabash, Indiana.³

Historian Peter Tocco wrote⁴ "The terms [of the contract with Brush] also specified that the lights should illuminate a half-mile radius with the brilliance of a standard-size gas burner at all points, thus lighting most of the town. This was the distinction upon which Wabash would later base its claim to being the world's first city to be "generally" lighted by electricity."⁵ Brush's Papers, reside at Case Western Reserve University.⁶ It is likely primary sources regarding Wabash could be found there, but such research is outside the scope of this review.

The following points address the each statement on the marker:

- An 1880 Wabash newspaper article confirms that the date given in the first line of the text is correct.⁷
- "Officials of Wabash began experimenting" is a misleading statement. Newspaper accounts clearly tell how dangerous it was to set up the lighting system and that it was done by professional electricians from Cleveland.⁸
- Two newspaper editors from Wabash heard about Brush's 1879 successful experiment to briefly light a Cleveland park with arc lighting, but their contribution is overlooked by the marker text. They met with Brush and contracted a free, two week experiment to light the entire town of Wabash.⁹ If successful, the town would buy the entire lighting system for \$1,800.¹⁰ Four 3,000 candlepower lamps were used and they were placed atop the courthouse.¹¹ The lights were a success and the town purchased the lighting system.¹²
- That the lights were used until 1888 could not be confirmed by IHB staff at this time. Secondary sources claim the lights were used until September, 1888.¹³ September issues of the *Wabash Plain Dealer* are silent on the issue. A December 29, 1906 *Indianapolis News* article gives the date as 1889.¹⁴



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Learn More

Charles F. Brush's article on the arc light in *The Century Illustrated Monthly Magazine* is [available online](#).

Learn more about [Charles F. Brush](#) and [Electricity](#).

More information about Arc Lamps is available from the [Institute of Engineering and Technology](#) and [The Edison Tech Center](#).

Historian Peter Tocco gives a detailed history of the events that lead citizens of Wabash to get street-lighting for their city in "The Night They Turned the Lights On in Wabash," *Indiana Magazine of History*, XCV: 4, (Bloomington, Indiana University, December, 1999), pp. 350-63.

¹ Jeffery La Favre, Ph.D., "[Charles Francis Brush and the Arc Light](#)," La Favre states that "Charles Francis Brush was an American pioneer in the commercial development of electricity. His inventive genius ranked with an elite group of electric pioneers including Thomas A. Edison. Brush designed and developed an electric arc lighting system that was adopted throughout the United States and abroad during the 1880's. The arc light preceded Edison's incandescent light bulb in commercial use and was suited to applications where a bright light was needed, such as street lights and lighting in commercial and public buildings. A key element in Brush's arc lighting system was his dynamo (electric generator). The dynamo was the workhorse of the Central (power) Station, a concept developed independently by Brush and Edison, which eventually grew into the electric power generating industry."

² Charles F. Brush, "The Arc Light," *The Century Illustrated Monthly Magazine*, V. LXX, New Series: V. XLVIII, May, 1905, to October, 1905, (New York, The Century Company, 1905) pp. 110-18, Accessed [Google Books](#).

"The year 1878 was a memorable one in the history of electric lighting. Not only did it witness the first industrial use of electric lights on any considerable scale, but it was in that year that I had the great good fortune to invent and develop the modern series arc-lamp with its regulating shunt coil. It was this invention which made arc-lighting from central stations commercially possible; and I think it may be justly regarded as marking the birth of the electric lighting-industry as it exists today."

³ Brush, 115-117.

⁴ Peter Tocco, "The Night They Turned the Lights On in Wabash," *Indiana Magazine of History*, XCV: 4, (Bloomington: Indiana University, December, 1999), pp. 350-63.

⁵ Tocco, 353.

⁶ "Charles [Francis] Brush Papers, 1869-1929, Case Western Reserve University, Kelvin Smith Library Special Collections, Cleveland, Ohio, Accessed <http://library.case.edu/ksl/collections/special/index.html>

⁷ "Electric Effulgence," *Wabash Plain Dealer*, April 2, 1880, p. 3, c. 2.

"Lighted by Lighting" (Special Dispatch to the *Chicago Tribune*) *Wabash Plain Dealer*, April 9, 1880. Article states, "As the clock struck 8 tonight four electric lamps of three thousand candle power each, put forth a noonday light for one mile circumference."

⁸ "The Electric Light," *Wabash Plain Dealer*, March 19, 1880, p. 3, c. 4. Article states, "All the machinery and lamps of the electric light have arrived. They came by freight over the C., W., & M. R. R., from Cleveland and are now awaiting arrival of the engineer from the factory to superintend the placing of the apparatus on the dome of the court house. It will take a week to get the machinery and lamps in place and a few days to get it all smoothly working. Several days notice as promised will be given of the first formal exhibition of the light, which will undoubtedly be witnessed by the largest crowd ever seen in Wabash."

"The Electric Light," *Wabash Plain Dealer*, March 26, 1880, p. 3, c. 2. Article states, "For several days, four large boxes and several coils of wire marked: Brush Electric Light," have attracted a great deal of attention at the C., W., & M. R. R. freight depot. This was because these boxes were supposed to contain the apparatus by which the city is to be lighted from the dome of the court house and for which the Council has contracted if it does work. Last Monday evening, Mr. F. C. Phillips, of Cleveland,



Ohio, one of the principal electricians of the Telegraph Supply Company, the manufacturers of the Brush Electric Light, arrived in town and the next morning commenced the superintendency [sic] of placing the lights upon the dome which will on next Wednesday evening commence shedding their effulgence over the hitherto dark streets of the city.”

...“The lamps are four in number and hang suspended midway of the iron flag-staff that towers nearly 200 feet above the business part of town. From these lamps the observer will notice two ordinary sized copper wires stretching down over the roof of the building from whence they descend into the basement and there connect with the electric generating machine driven by a twelve horse power engine that has been temporarily placed near the Court street side of the court house.”

⁹ “Thad Butler in Tale of Wabash,” *Wabash Plain Dealer*, September 16, 1910. Butler explains, “Nothing ever gave it [Wabash] wider reputation than the fact that it was “the first city in the world to be lighted by electricity. This was in April, 1880, [actual date, March 31, 1880] and it came through the efforts of T. P. Keaton and myself . . . both of us made trips to Cleveland, negotiated with the brush company for a dynamo and four arc lights and equipments, and turned our attention to interesting the people in the project. A contract was made with the city to put up the lights, illuminate the city free for one week, and if certain requirements were fulfilled we were to deliver the plant to the city for \$1,800 cash . . . The lights were a success, people came from fifty miles around to view their splendor. . . .”

“Charles [Francis] Brush Papers, 1869-1929, Case Western Reserve University, Kelvin Smith Library Special Collections, Cleveland, Ohio, Accessed <http://library.case.edu/ksl/collections/special/index.html>. Brush’s papers should contain the correspondence and meeting with Butler and Keator, as well as the contract.

Tocco, p. 353, “In fact, the *Wabash Plain Dealer* played a pivotal role in procuring the lights and also putting down opposition to the lights. The paper’s chief editors, T.P. Keator and Thad Butler, had first come up with the idea for the lights . . . The idea of electric lights followed naturally as inventor Charles Brush had made headlines the previous year when he tested his electric lights in a public square in Cleveland . . . Keator and Butler traveled to Cleveland to meet brush, who was eager for an opportunity to test the latest improvements to his lights. . . .”

¹⁰ See footnote 10.

¹¹ See footnote 9.

¹² “The Electric Light, The City Council More than Satisfied with the Test-They Formally Accept the Light and Pay For It,” *Wabash Plain Dealer*, April 9, 1880, p. 3, c. 3. “The City Council met last evening in special session to act upon the adoption or rejection of the Electric Light, which had been tested for the past two weeks. Every member of the Council present stated that from their own observations they were satisfied that the light more than fulfilled the guarantee that had been made, that it was to light an area one mile in diameter as light at the farthest possible point as it would be from a gas lamp of ordinary street size on hundred feet distance, and a resolution was promptly passed that the City Clerk draw an order on the City Treasurer for \$1,800, the price of the apparatus complete. The light has now been burning nearly two weeks, and careful tests have been made as to the cost, which show it to be not only the cheapest light in the world, but actually workings are better than any estimates yet made. . . .”

¹³ Tocco, 361. “Arc lights enjoyed a boom period of about seven years in Indianapolis until Edison’s incandescent lighting began to replace them in the late 1880s . . . The Edison lighting system, clearly superior to the Brush system, began to quickly to displace arc lights. After eight years of use, the Wabash arc lights were among those replaced. . . .”

¹⁴ “When Wabash Turned Night Into Day and Scientists Expected Corn to Grow Amazingly,” *Indianapolis News*, December 29, 1906.

IHB researchers have reached out to the *Wabash Plain Dealer* for confirmation, and a former reporter for the paper is researching the discrepancy. This review will be updated as new information becomes available.