The iron industry in the upper Hudson River Valley thrived in the 19th century. The various factories in the Troy area manufactured iconic products, such as parts of the USS Monitor and the replacement for the Liberty Bell, as well as stoves, horseshoes, and railroad spikes.¹ The Burden Iron Works was just one of several industries in the region; however, its history is still significant.

Henry Burden's ingenuity is one of the reasons the Burden Iron Works was so successful in its day. A native of Scotland, Burden arrived in the Albany area in 1819 and by 1822 he had become superintendent of the Troy Iron and Nail Factory.² Burden continued to expand the business. He was a great innovator: Burden was granted patents for a spike-making machine in 1825, a horseshoe-making machine in 1835, and a hook-headed railroad spike in 1840.³ By 1848, Burden achieved sole ownership of the company and it was renamed Henry Burden & Sons.⁴

Though Henry Burden died in 1871, the Burden Iron Works continued to be a very productive industry through the late 1800s. In the 1880s the company was producing almost a million horseshoes per week.⁵ The company also provided a

¹ "Burden Iron Works Museum," *Hudson River Valley National Heritage Area*, accessed April 19, 2010, http://www.hudsonrivervalley.com/Details.aspx?sid=a82708a3-1b48-4103-b099-5e24dc55f018.

² "Chronology," *Hudson Mohawk Industrial Gateway*, accessed April 20, 2010, http://www.hudsonmohawkgateway.org/4 heritage chron.html.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

means of employment for many in the Albany and Troy area. The South Troy iron and steel industries employed around five thousand in the 1880s.⁶

Besides the productivity of the Iron Works, what made it so significant was the Burden Water Wheel. The wheel, put into use in 1851, was the most powerful vertical water wheel in history.⁷ It was 60 feet across, 22 feet wide, and could theoretically generate up to 1100 horsepower.⁸ The Water Wheel is also credited as the inspiration for the world's first ferris wheel.⁹

Though the Burden's Iron Works and his Wheel were once parts of the thriving iron manufacturing industry, the turn of the century saw their demise. In the 1890s the Burden Water Wheel ceased operations and the upper part of the Iron Works was shut down. ¹⁰ The Water Wheel finally collapsed in 1914, and in the 1940s, remaining pieces were sold as scraps. ¹¹

-Jane Sheehan '10

6 Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ "Preserve American Community: Troy, NY," *Preserve America*, accessed April 20, 2010, http://www.preserveamerica.gov/PAcommunity-troyNY.html.

^{10 &}quot;Chronology."

¹¹ *Ibid.*

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