The North River (Clermont)

The *North River* was the first commercial steam driven boat to sail the Hudson River. The *North River* shocked and amazed all who heard and observed its first voyage on the Hudson River. The people who witnessed it were often mere farmers or landowners, who had never seen a machine of the like. "She was described in the night, to those who had not had a view of her, as a monster moving on the waters, defying the winds and tide, and breathing flames and smoke." The steamboat was immense in both size and appearance. It controlled the waters confidently and terrified all those who could not understand its complexities. Fulton designed, with the aide of his benefactor, Robert Livingston, a truly remarkable innovation. Such machines as the *North River* had the potential to change the face of New York and the greater Hudson Valley forever.

Robert Fulton met Robert Livingston in the dismal winter of 1802.² This chance meeting birthed the beginning of one of the most innovative partnerships of the early 19th century. Robert Livingston was a wealthy politician whom was already rooted in American history. He helped in the writing of the Declaration of Independence and had been presently, a U.S. ambassador. The chance meeting happened on a diplomatic trip to France, where Fulton had become quite the social climber. They were both present at a party being held by a mutual friend. That night Livingston entertained Fulton with his notions of steam travel which intrigued the young inventor. Fulton had toyed with steam propulsion on a number of occasions, but never had the funds or pure desire to see it to fruition. This time was different; he was frustrated with his submarine and torpedo

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¹ Sale, Kirkpatrick. <u>The Fire of His Genius: Robert Fulton and the American dream</u>. New York: Simon and Schuster, 2002. p120

² Sale. The Fire of His Genius: P82

development and had an eager appetite to take on a challenge that might garner him fame and wealth. Fulton and Livingston agreed, after much discussion, to build one of these ships propelled by steam. Fulton had convinced himself that he knew exactly how to construct the ship, by means of a steam engine attached to a large extended fishing boat. Fulton was convinced that the engine best suited must come from England; from Boulton, Watt & Co.³ Livingston delivered the engine to America through his diplomatic connections. Fulton calculated and used a variety of methods to construct a working prototype. He impressed Livingston, who agreed that they were ready to build a full-scale boat.

In 1806, Robert Fulton arrived in New York and began the legendary construction of the *North River*. He spent nearly a year retrofitting the engine to fit and operate on the medium sized fishing boat. He designed the plans and supervised the building of his steamboat. Based on Fulton's calculations, it would be simple to continue building more of them if the first excursion proved to be successful. The ship was ready for launch August 17th 1807.⁴ The boat was named the *Clermont* after the Hudson River home of Robert Livingston, the proprietor of the manufacturing of the commercial steamboat.⁵ Fulton preferred to call the ship the *North River*, which is how he referenced it whenever writing logs for the ship. The *North River* was a remarkably designed ship that was economically feasible. It is important to note the dimensions and size of the ship that was attached to steam engine.⁶

The North Rivers dimensions:

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³ Ibid

⁴ Philip, Cynthia Owen. <u>Robert Fulton: Biography</u>. New York: 1985. p201

⁵ Ibid

⁶ "The North River Steam Ship Clermont." <u>K.I.A.C. GLOBAL NUMISMATICS</u>. 0301.2006. Hudson River Maritime Museum. 0702.2006 http://www.kiac-usa.com/clermont.html#MIDDLE>.

1. Length: 43m (142 ft.)

2. Max width: 4.3m (14 ft.)

3. Max. Height: 19m (62 ft.)

4. Draught: 4.8 m (15 ft. 9 in)

5. Displacement: 1,210 tons

6. Average Speed: 4.7 miles per hour

7. Time saved: 150 miles in thirty-two hours

8. Sailing schooner time: 4 Long Days according to wind and tides.

These measurements help us to understand that the *North River* was relatively average size boat with one major modification. It carried a steam engine which increased its speed and weight significantly. The boiler was a low-pressure type, 20 feet deep and 8 feet broad, which became cumbersome and problematic in terms of floatation for the long and slender vessel.

The boat left with a small crew and list of invited guests. The send off was magnificent and covered by the press. Livingston made it a social event, much to the irritation of Fulton, who "perceived the maiden voyage as an experiment, not a gala." Fulton had confidence in his invention, but not to the level that the press assumed. It was its maiden voyage and was seen by Fulton as a primarily a test run. He was nervous, but ambition quelled his fears and allowed him to stay focused.

Fulton saw his voyage as a means to change the world. He knew that the potential for success and error was great, but either way it would benefit the world greatly. Fulton also had the desire from early in his life to live in wealth and luxury and after all his failed inventions this was to be the means of his attaining that dream. Fulton

⁷ Philip. Robert Fulton: Biography.. p198

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told the American Citizen publication that the steamboat would "certainly make an exceedingly valuable acquisition to the commerce of the Western States."

The boat traveled 150 miles up the Hudson River from New York City to Albany, in thirty-two hours (minus two for the overnight layover). Described as "a backwoods saw-mill mounted on a scow and set on fire," the trip was loud, but entertaining. In the late hours of the darkened river, Fulton led the crew in singing "Ye Banks and Braes o Bonny Doon," a song that his descendants say was a favorite. The song was dark and talked of death, but the Scottish tune kept everyone from near exhaustion. In the early afternoon of August 18th, as the steamboat docked at Clermont its namesake, Livingston came down from his mansion to give a short speech. Livingston tried to speak over the ominous noise of the steamboat to announce the betrothal of Harriet Livingston to Fulton, but to no avail. The steamboat managed to steal the spotlight by billowing thick smoke and a loud monstrous sound. Livingston's speech was engulfed by the billowing beast that stood behind him.

After the brief stay, the voyage continued onward up to Albany. They were greeted with onlookers galore and a cheer from the growing crowds. The return trip was uneventful, with fewer onlookers. Upon conclusion of his voyage Fulton immediately set out making improvements to the *North River* and prepared it for commercial voyage on September 4th of that year. ¹² Commercial service would begin on Friday the 4th of September, at 6 a.m. in the morning, and arrive at Albany, on Saturday, at 6 p.m. in the

⁸ Philip. Robert Fulton: Biography.. p198

⁹ Sale. The Fire of His Genius: P121

¹⁰ Ibid

¹¹ Ibid

¹² Sale. <u>The Fire of His Genius:</u>. P128

afternoon.¹³ The ships route would make birth at Newburgh, Poughkeepsie, Esopus (Kingston), Hudson, and Albany within 36 hours. ¹⁴ The trip offered provision accommodations, and timely arrivals at ports. 15

The steamboat was a complete success not because it was the first steamboat to be built, but because it was the most practical, economical, and commercially successful application ever to be designed. After this success, Fulton focused on the commercial monopoly he had created with Livingston. They built a system to operate, and scheduled births at approximated times.

Fulton was contracted to build steam-powered ships all along the east coast as well as more for the Hudson and other rivers. He also managed to build boats that traveled around New Orleans in 1811.¹⁶ Thirteen of Fulton's sixteen designs were operating at the time of his death in 1815. These included The Car of Neptune, Paragon, Richmond, and Firefly on the Hudson, the North River (Clermont) was retired in 1814, its ultimate fate unknown, the elegant *Fulton* on Long Island Sound, five ferries running from Manhattan to New Jersey and Brooklyn, the Washington on the Potomac, and the Vesuvius and Aetna on the Mississippi (the first New Orleans sank in 1814, and its replacement did no run until later in the year).¹⁷

His steamboats were a commercial success and gave the growing industrialized America a technological innovation that had been in development for almost thirty years. Fulton himself would never know the grand gifts he bestowed upon the world. While we have advanced beyond the steamboat, his Manhattan ferry system remains to this day a

Sale. The Fire of His Genius: P128
Ibid

¹³ Ibid

¹⁶ Philip. Robert Fulton: Biography.. p285

¹⁷ Sale. The Fire of His Genius: P170

primary means of transport for New Yorkers. His legacy lives on and his ideas have been the groundwork for further innovations around the world.

-Matthew Hittenmark, Marist '06