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## Steam Power on the Connecticut

Guy A. McLain, Jr.

On the first day of December 1826, William Lathrop, excited over the appearance of the first steamboat to arrive at Springfield, wrote the following account of its arrival:

... and when she turned the point so as to be seen by the multitude, they could not express their feelings. The enthusiasm with which she was received was manifested by the constant discharge of cannon, the ringing of bells, and by repeated and long-continued cheers. <sup>1</sup>

The pandemonium inspired by this event at Springfield was repeated all along the river as the steamboat *Barnet* made its maiden voyage on the upper Connecticut. The arrival of steam power marked an important development in the life of the river valley, for the steamboat not only represented new technological progress, but was also important for the commercial and social vitality of the entire region. The overwhelming enthusiasm it inspired tells us much about the economy and culture of the Connecticut River Valley at this time, as well as some of the changes that were taking place in the early decades of the nineteenth century. Before these questions can be considered, it is necessary to look at the context which inspired them, since by the time the steamboat arrived, the river and the land it nurtured had seen a long and varied history.

The Connecticut River, now largely abandoned for economic purposes, once played a vital role in the commerce and industry of New England, and served as a major stimulus to the development of Springfield, Hartford, and other cities along the river. For more than two centuries, this river served as the only lifeline for the small rural settlements that clung to its banks and tilled the rich soil of its valley. Throughout the colonial period, when few passable overland roads existed, the river and its tributaries served as a trade route which unified the region into a cohesive geographical and economic unit. The small villages of the north, in Vermont and New Hampshire, were directly linked by the existence of the river to the larger communities of Hartford and Springfield. During the winter months, when the river was frozen, the waterway served as a highway for wagons and sleds. Through the remainder of the year, the river was in constant use both as a means of transporting goods from town to town and as a trade route for shipping exports to distant markets.

The primary means of shipping goods up and down the river during the seventeenth and eighteenth centuries was the flatboat. These crafts could be very

large, and often employed a mainsail located in the middle of the boat. When the wind was not adequate, the boats were propelled by poling, whereby a man would spear the bottom of the river with a pole twelve to twenty feet long, and then walk the length of the boat. The whole process was extremely tiring, and it caused a severe abrasion on the front shoulder area from rubbing against the pole as he walked the length of the boat.<sup>2</sup>

Transportation by means of the flatboat was strenuous and slow, but it served the needs of the Connecticut River Valley until after the Revolution. Before that time, commerce, though vital to the valley, remained small in relation to what it would become just a few decades later. This is clear from the number of ships engaged in commerce at the time. For example, in 1731, the entire colony of Connecticut claimed only forty-four trading vessels, transporting only 1,415 tons. By 1773, shipping had already increased to 10,317 tons.<sup>3</sup>

After the unsettled years of the Revolution, the Connecticut River Valley population steadily increased, and with this growth came a corresponding need for a more efficient means of transportation. Already by 1790, the population of the counties which made up the valley numbered 202,000.<sup>4</sup> And by 1810, the towns just along the river numbered 129,000 inhabitants.<sup>5</sup> Although the region remained largely rural, and the major exports still consisted primarily of agricultural products, communities such as Springfield, Northampton, and Hartford took on more and more of the characteristics of small cities. From 1790 to 1820, the population of Hartford grew from approximately 4,000 to just under 7,000. In the same period Springfield almost tripled its size, growing from approximately 1,600 to almost 4,000 inhabitants.<sup>6</sup> Another illustrative figure is the number of businesses involved in commerce at this time. As early as 1780, Springfield boasted seventeen stores which depended at least in some measure on the river trade. The vitality of Hartford during this period is reflected in the existence of some ninety merchants in the year 1795.<sup>7</sup>

The period directly after the Revolution was also a time of economic expansion. In addition to a large market for agricultural products, particularly tobacco, the fishing industry was an important business along the river. As far up the valley as Northampton, the river yielded large supplies of shad and herring, which were usually exported to the West Indies. Another important product for the West Indies trade was brandy and gin. This business was so successful and became so important to the region that by 1810, there were approximately 125 distilleries in Vermont alone.

Logging also played an important part in the economy of the valley. Rafts of logs were floated down the river from Vermont and New Hampshire. This in turn spurred the development of many shipyards in the towns along the lower river. Springfield shipyards alone were regularly engaged in building ships as large as ninety tons.<sup>9</sup>

These combined forces, generated by an increasing population and a burgeoning commercial sector, formed a strong incentive to improve the efficiency of river transportation. Although shipment of goods by flatboat continued until well after the Revolution, there was a growing demand for improvements both in

the river itself and in the boats which transported goods and people. The major problem with travel up and down the river was the existence of several falls. In addition, at various locations between Hartford and Middletown, the river depth was only five and a half feet. In order to alleviate these problems, as early as 1764 Hartford merchants petitioned the Connecticut Legislature for a charter to deepen the river channel. However, it was not until 1800 that the river was finally deepened by two and a half feet. <sup>10</sup>

Work on the falls began a few years earlier in Massachusetts. The greatest obstacle to navigation on the upper river was the South Hadley Falls, just north of Springfield. At this location, the river dropped fifty-five feet over more than a two-and-a-half mile length. The disruptions in shipping brought about by these falls led 22 local businessmen to meet in 1792 and form "The Proprietors of the Locks and Canals on the Connecticut River." These business leaders, primarily from Springfield, Northampton, and Deerfield, engaged Ariel Cooley, an engineer from Chicopee, to construct the canal. The difficulties involved in construction at this location were extremely complicated as well as costly, and eventually the company was forced to reduce the planned width of the canal. But finally on April 16, 1795, the first commercial craft travelled through the canal. <sup>11</sup>

The success of the South Hadley Canal was immediate. In the first year of operation, 6,185 tons passed through the canal, and by 1822 the goods shipped through the locks had increased to approximately twenty thousand tons. The operation hit its peak in 1833 when \$20,016 were collected in tolls. Soon several locks and canals followed the South Hadley system. In 1800, a canal opened at Turners Falls, and this was followed by three systems in Vermont: Bellows Falls (1802), Summers Falls (1810), and White River Falls (1810). Finally, a canal was opened at Enfield, Connecticut, in 1829. With this system of five, and later six canals in operation, trade along the river dramatically increased. Flatboats were soon transporting large quantities of iron, millstones, molasses, and rum up the river, while farm products, potash, lumber, and maple sugar travelled down the river.

At the same time that merchants and civic-minded leaders were taking steps to improve navigation on the river, others sought ways to improve the boats which transported the goods. As greater and more varied demands were placed on the shipping and transportation sector, the flatboat was increasingly viewed as too inefficient and too slow for the needs of the valley. Soon, enterprising men began to experiment with the steam engine as a means of propulsion. The first successful application of the steam engine was in 1787 when John Fitch, originally from Windsor, Connecticut launched a steam-powered craft on the Delaware River. This was followed by the work of Samuel Morey of Orford, New Hampshire, who in 1792, the same year that work was begun on the South Hadley Canal, developed a steamboat that successfully travelled between Orford and Fairlee, Vermont. Morey's boat was the first steamboat to ply the waters of the Connecticut River, and his initial success inspired further development. A few years later, Morey developed a stern-wheeler which travelled from New York to Hartford. But his invention was simply ahead of its time. Morey was unable to gain the necessary funding to put his steamboat in operation and to capitalize on

his work. Successful commercial development had to wait until Robert Fulton. 15

The first commercial steamboat to find employment on the Connecticut River was the *Julianna*, which began passenger and shipping service between Middletown and Hartford in 1813. Steamboat travel represented a significant increase in speed and comfort, since a boat like the *Julianna* was capable of travelling down to Middletown in just three hours, and making the trip back up the river in four and a half hours. <sup>16</sup> Progress in the steamboat industry continued when in 1822, William C. Redfield of Cromwell, Connecticut incorporated the Connecticut Steamboat Company. His enterprise ran a sixty-two ton sidewheeler between Hartford and Essex as well as another steamboat between Hartford and New York. Both lines prospered and spurred other entrepreneurs to enter the industry and found the Hartford Steamboat Company. This company commissioned the construction of the 273 ton *Macdonough* which was able to travel from Hartford to New York in fifteen hours and could sleep seventy-six passengers.

The success of these companies in the early 1820s established the commercial feasibility of steamboat operation on the lower Connecticut River. Yet, due to the obstruction of the Enfield rapids, which would not be improved until 1829, no steamboat had travelled north of Hartford. This would soon change as a new commercial threat loomed on the horizon. The merchants of New Haven, who were hoping to steal some of the river traffic from Hartford, obtained a charter in 1822 to build a canal from New Haven through Farmington and on to the Massachusetts border, where it would connect with the Hampshire-Hampden canal to Northampton. If the New Haven canal proved successful, the business interests of Springfield and Hartford would be severely damaged. <sup>17</sup>

New Haven's threat spurred Hartford business leaders to look for ways of developing river transportation above the Enfield rapids. One solution was found in the building of the steamboat *Barnet*. In 1824, the Connecticut River Company commissioned Brown and Bell of New York to build a boat which could successfully navigate the rapids between Hartford and Springfield. They developed a seventy-five foot long craft which only displaced twenty-two inches of water, thus allowing it to pass over the rapids. The name *Barnet* was selected for the Vermont town she planned to reach, but never did. <sup>18</sup>

The boat was completed in August of 1826, and by mid-November the engine had been installed and the boat was ready for its first journey up the Connecticut. On November 17 the sternwheeler set out from Hartford with Roderick Palmer as captain and Adin Allen to pilot her through the Enfield rapids. All went well until the boat reached the rapids at Warehouse Point. She began to climb, but the combination of an unfavorable wind and insufficient power prevented the boat from making it up the rapids. After strengthening the engine and attaching flatboats to each side, another attempt was made. This time, with the combined power of thirty polemen and a stronger engine, the boat was worked up the river. Upon arriving in Springfield almost the entire town came down to the river to see her.

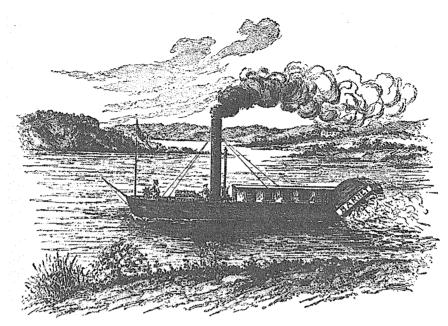
It is at this point that the story of the *Barnet* is so vividly captured in the letters of William Lathrop, an eyewitness to many of the events surrounding the steamboat's first voyage. William and his family were inextricably connected to the life and vitality of the river. William was born in West Springfield and raised in one of the most prominent families of the Connecticut Valley. His grandfather, the Reverend Joseph Lathrop, was a graduate of Yale College and had served as minister of the First Congregational Church of West Springfield for sixty-three years. William's father, Samuel Lathrop, was an important political leader, both on the state and federal level. He served in the Massachusetts State Senate from 1808 to 1810 and again from 1814 to 1818. He then served four successive terms in Congress from 1819 to 1827. In 1824 he ran for Governor of Massachusetts, but was narrowly defeated by a margin of only 4,000 votes. After serving in Congress, he returned to the State Senate from 1828 to 1830, and was president of that body in 1829 and 1830.

The letters, which describe the first voyage of the *Barnet*, were part of the correspondence between William and his father, while Samuel was serving as a Congressman. The surviving letters begin in 1819 and continue through 1827, thus corresponding to the years Samuel served in Congress. At the time that William gave his account of the *Barnet* voyage in December 1826, he was living in West Springfield and had just one year earlier completed his formal education at Yale College.

The arrival of the *Barnet* at the docks in Springfield was extremely important to people all along the upper river, for it meant progress and commercial expansion. The crowds which witnessed this event sensed that they were experiencing a momentous event in history, an event that would bring greater prosperity and fundamental changes to their society. This excitement and expectation was eloquently captured in William Lathrop's letter dated December 1, 1826.

If you had been one hour later in setting out for Washington, you might have witnessed the arrival of the Barnet at Springfield. Her approach was first known by the people that came down from the hill . . . . It was still some time before she made her appearance so as to [be] visible from the landing. But soon the clouds and steam and smoke which she threw out might be seen above the trees, and when she turned the point so as to be exposed to the views of the multitude, they could not express their feelings. The enthusiasm with which she was received was manifested by the constant discharge of cannon, the ringing of bells, and by repeated and long-continued cheers. She came up very handsomely, passed up nearly to the bridge, and taking a broad width, hauled alongside of a boat at the landing. Her deck was immediately thronged with spectators, all anxious to have a peep at 'the creature,' and to examine the make of her construction.

Lathrop went on to describe the *Barnet*'s activities for the next two days in which crowds constantly besieged the boat at every landing. William then described his trip on the boat from Springfield to the locks at South Hadley.



The Barnet, the first upriver steamer, travelled as far north as Bellows Falls before being halted by the narrow canal there.

I had got in at Springfield expecting to get out at our landing, [West Springfield] but Mr. Palmer saying that his wagons had gone up to the canal, and could return that evening, and that we might ride home, George, Hunt, and myself concluded to accompany them hither. It was already dark when we arrived at Willimanset [in the Chicopee section of Springfield]. The man who owns the team usually employed in drawing up boats up these rapids absolutely refused to spare them for this purpose, and accordingly we got out, and I with the assistance of a few men on shore, hauled her over [the Willimansett Falls], with the barge in tow. We arrived at the Canal at about 7 o'clock. People were collected all along the banks and saluted the Barnet as she passed with three hearty cheers . . . . Mr. Palmer told me he had concluded on waiting to see the boats pass the locks. In consequence of this I witnessed her passage through the canal and did not reach home until evening. Some difficulty was experienced in passing into the first lock, on account of a bend or elbows in it. Mr. [Enoch] Chapin, the keeper of the locks, generously gave permission to then work her through as they could, without regard to any damages they might offer to the locks. And accordingly, by taking off some of the planks upon one side and hewing a post very little on the other side, she gained admission without further difficulty.

He concluded this letter with a pointed remark directed against the New Haven and Northampton newspapers, which were loyal to the New Haven canal project,

and thus hoped to see the *Barnet* fail: "The success of the *Barnet* at *this* time is particularly grateful after the ridiculous articles in the New Haven and Northampton papers exalting at the failure of her first attempt to pass the falls."

Samuel Lathrop answered his son's first letter on Dec. 8, 1826. He had just arrived back in Washington. "I saw the Springfield paper the morning after my arrival at Hartford, and from what I had before seen of the feelings of the people in the expectation of her arrival, was able to form some conception of them, when they came to realize it." Samuel commented further on William's remark about the New Haven and Northampton papers. "The tone of the Northampton paper will be changed. The sentiment of the body of people in that town will favor the improvement of the river, notwithstanding the interest which some of her leading men have in the Canal, and I very much mistake the tide of public opinion of our legislature if not compelled to grant the charter."

On the fifth of December, William again wrote his father about the progress of the *Barnet* up the river. There was some question as to whether the *Barnet*'s width would allow her to pass through the locks at Montague, but she proceeded anyway.

She arrived in Northampton on Friday afternoon, and staid there that night . . . An alteration has been made in the machinery while she was at S[outh]. H[adley]. which increased the speed materially . . . . Mr. Palmer told me, however, that above Northampton she went at the rate of 9 miles an hour, having her barge in tow. He left Greenfield before it had been ascertained whether she would be able to pass those locks, the general impression, however, was unfavorable.

## On December 12 William wrote:

In the early part of last week, the river being very full of ice, and it being expected daily to shut over, the *Barnet* halted in the locks at Montague for the season. Rod. Palmer, the captain, returned home with some others. But soon after the weather became warmer, the ice left the river, and it was deemed expedient to proceed . . . . By the latest accounts received here they were just entering the limits of New Hampshire, and expected to proceed as far as Bellows Falls.

When the steamboat reached Bellows Falls it was determined that the *Barnet* was too wide for the locks, and it was forced to turn back south earlier than expected. Although she had failed to reach the town of Barnet, the original goal, her advance this far north proved that commercial steamboat operations were possible in the upper part of the river.

Later in December, William determined that a trip to New Haven was necessary. Apparently, his younger brother, John, was having difficulties at Yale College and was not to be re-admitted for the next term. William felt that if he spoke to the administrators at Yale College on his brother's behalf, he could procure his re-admission, and this would more than justify the expense of the

trip. Furthermore, William had just left the College a year prior to these events, and many of his friends were still in New Haven. He saw this trip as a chance to see them during Christmas.

Just as William was about to set out on his journey, the *Barnet* unexpectedly arrived back in Springfield. William seized the opportunity to travel by steamboat on the first leg of his journey. His account of the first steamboat trip from Springfield to Hartford is quoted in its entirety below.

The reason of my leaving house so suddenly, was the unexpected return of the 'Barnet' from the north. I was induced to set out a few days earlier than I otherwise should have done for the pleasure of being passenger in 'the first steam boat from Springfield to Hartford.' But though she returned upon us rather unexpectedly, she found us not altogether unprepared to receive her. We had sufficient notice of her approach to station a man at our bell-rope, who gave the signal on her first appearance. It was answered by a gun from the boat. I [watched] from Springfield, where the firing continued till she landed there. She took in passengers from our landing and landed them out Springfield, where they stayed Monday night, and Tuesday morning at half past 9 oclock continued her course down the river. On arriving at the head of Enfield falls, they hailed for pilots and two came aboard; but they declared that it was absolutely impossible for them to discern the channel as the sun shone bright and cast the reflection from the water directly ahead. Accordingly we were obliged to cast anchor and lie by. As it was a cold day we went ashore, where we remained till 2 oclock. We then hoisted anchor and resumed our course. We passed Enfield falls without any accident or delay. Stopped at Warehouse point and took in a load of Gin and proceeded on coming in sight of Hartford, a salute was fired from the boat, which was returned from the city and continued till she landed at the wharf. A great crowd of people was assembled there who evinced their joy by loud and repeated huzzas. A supper was given in the evening at Morgan's and was attended I suppose by about a hundred gatherers of the most respectable in the city. Gen. Ferry presided and Mr. Smith, Jos. Pratt, and Mr. Woodbridge acted as vice pres. After Gen. Ferry retired Mr. D. P. Wadsworth was called to the chair. Various toasts were drank, relating in general to the same subject the improvement of the river navigation with an occasional side [attack?] at the Canal. As they were not printed I can give you only two or three of them. By Mr. S. Lyman of Springfield. The Farmington Canal. A 'broken cistern that can hold no water.' [This may allude to the sandy soil through which that canal went]. By Mr. Pratt. 'The Barnet. May her progeny be numerous and powerful.' The Towns on Con. River. 'What God hath joined together, let not man put asunder.' 'Confusion to those ignorant quacks who would resort to tapping and bleeding where a gentle cathartic would operate as well.' Mr. Geo. Beach gave. 'The Hon. Samuel Lathrop, the firm, undeviating friend of internal improvement.'

Josiah Pratt's toast refers to the New Haven canal, with his point being that there was no reason to build an entire canal when improving just the short stretch of the Enfield rapids would work just as well.

The success of the Barnet assured the continued commercial viability of Springfield and Hartford until the railroad became the dominant means of transporting goods. It also inspired other entrepreneurs to investigate the potential of steam power. Soon, other steamboats were being developed for use on the upper Connecticut. In 1828 Thomas Blanchard of Springfield built a sidewheeler which could carry more than sixty passengers. The Blanchard was immediately put into service between Springfield and Hartford, but she developed some of the same problems the Barnet had experienced. Though she was quite capable of navigating the Enfield rapids going down the river, coming back up was a severe trial. The following year, ship builders in Springfield built the Vermont, which was seventy-five feet long, yet displaced only one foot of water. Because of her sternwheel design, she was capable of passing through the Bellows Falls canal and travelling well north of the reach of the Barnet; but at the Summers Falls canal. she too was forced to turn back. Springfield's third attempt at constructing a steamboat capable of reaching Barnet was called the Ledyard. This boat reached well beyond the distance of her predecessors; vet, within ten miles of her destination she hit a sand bar. Several attempts were made to pull her over, but all failed. The Ledyard was forced to return to Springfield just short of her goal.<sup>20</sup>

Meanwhile, the New Haven merchants, who were vicariously responsible for inspiring the development of the steamboat on the upper river, finally completed their canal in 1834. It opened for business in June of 1835, but in its first three years of operation the canal lost over \$140,000. 21 In spite of the victory the Hartford merchants engineered with the *Barnet*, the commercial viability of steamboating on the Connecticut River was very brief, for the development of the railroad was just around the corner. As early as 1830 the first charters were granted to several railroad companies to develop lines out of Boston. By 1839, just thirteen years after the *Barnet* journeyed up the Connecticut, a rail line was completed which connected Boston to Springfield. A few years later, in 1844, the first north-south railroad in the Connecticut Valley established lines which connected New Haven, Hartford, and Springfield. 22 By the mid 1840s, transportation and shipping through the rail network had clearly established hegemony over steamboat shipping. 33 Thus, in less than two decades, the dominance of steam powered river transportation fell victim to new technological developments completely unforeseen in the days of the *Barnet*.

The epilogue to the story of the *Barnet* is also short lived, and is marred by tragedy as well. On November 5, 1827, while on a trip from New York to Hartford, the boat's boiler exploded. One person was killed and the ship was totally destroyed. The *Barnet* had been active less than one year, yet in that brief time, it played a key role in the life and economy of the Connecticut River Valley.

## NOTES

- William Lathrop, December 1826, ms. Springfield City Library Archives. The William Lathrop Collection. All further quotes from the letters of William Lathrop will not be footnoted.
- 2. T. M. Dewey, "Early Navigation on the Connecticut River: The first Steamboat," Papers and Proceedings of the Connecticut Valley Historical Society, 1876-1881, Vol. 1, p. 116.
- 3. Margaret E. Martin, Merchants on the Connecticut River Valley, 1750-1820 (Northampton, 1939), p. 20.
- 4. Ibid., p. 4.
- 5. Edmund Delaney, The Connecticut River: New England's Historic Waterway (Chester, Conn., 1983), p. 70-71.
- 6. Martin, Merchants on the Connecticut River Valley, p. 11.
- 7. Ibid., pp. 13-16.
- 8. Delaney, The Connecticut River, p. 75.
- 9. Martin, Merchants on the Connecticut River Valley, p. 7.
- 10. Ibid., p. 9.
- 11. David W. Bell, "The South Hadley Canal," Historical Journal of Massachusetts, XIII (June 1985): 163-164.
- 12. Martin. Merchants on the Connecticut River Valley, p. 10.
- 13. Bell, "The South Hadley Canal," p. 169.
- 14. Jerold Wikoff, The Upper Valley: An Illustrated Tour Along The Connecticut River Before the Twentieth Century (Chelsea, Vermont, 1985), p. 57.
- 15. Delaney, The Connecticut River, p. 104.
- 16. Ibid., p. 104.
- 17. Bell, "The South Hadley Canal," p. 169.
- 18. Delaney, The Connecticut River, p. 111.
- 19. Franklin Bowditch Dexter, Biographical Sketches of the Graduates of Yale College with Annals of the College History, Vol. 5 (New York, 1911), pp. 25-27.
- 20. Edwin Bacon, The Connecticut River and the Valley of the Connecticut (New York, 1911), pp. 333-338.
- 21. Bell, "The South Hadley Canal," pp. 168-169.

- 22. Thelma M. Kistler, The Rise of Railroads in the Connecticut River Valley (Northampton, 1938), pp. 39-40.
- 23. Ibid., p. 35.