

RACE FOR THE RIVERS

JAMES RUMSEY'S STEAMBOAT LEGACY

By Amy Mathews Amos

Most of us learned in elementary school that Robert Fulton invented the steamboat, his *Clermont* running up the Hudson River from New York to Albany in the summer of 1807. But for the people of Shepherdstown, West Virginia, Fulton merely outlived his competition. Local engineer James Rumsey was the steamboat's real inventor.

It's no secret that the steamboat played a pivotal role in America's development. In a young, mostly rural nation with terrible roads and difficult terrain, steam navigation opened up new worlds of opportunity and commerce. George Washington recognized this need early on, identifying the Potomac River as the great waterway that would link the vast resources of America's frontier with its ports in the East. What's less well known is that Washington also placed his bets on an obscure inventor, James Rumsey, who lived in what is now West Virginia.

In 1784, when Washington stayed at Rumsey's boarding house during one of his scouting trips west, Rumsey impressed him with new ideas for powering boats upriver against the strong Potomac current. In response, Washington presented Rumsey with a certificate stating that his discovery "may be of the greatest usefulness in our inland navigation." That certificate gave Rumsey entrée to other notables and the ven-

ture capital they might provide. Soon thereafter, Rumsey told Washington that his new boat would be powered by steam.

As history shows, however, it wasn't so easy. And Rumsey's greatest challenge wasn't figuring out how to use steam to propel his boat. Instead, he wrestled with other inventors, impatient investors, and primitive patent laws. In short, the race wasn't up the river; it was against time.

Surprisingly, Rumsey's largest competitor wasn't Fulton but a Connecticut-born, somewhat itinerant silversmith in Philadelphia named John Fitch, who also was raising funds and pursuing patents to develop a steamboat. In fact, it was the threat of Fitch overtaking his accomplishments that prompted Rumsey to demonstrate his imperfect, if functional, steamboat in Shepherdstown in 1787 before an enthusiastic local crowd. Ever since, Shepherdstown has claimed that event as the true invention of the steamboat, a full 20 years before Fulton ever got his feet wet.

Fierce Competition

In her book *Steam: The Untold Story of America's First Great Invention*, Virginia author Andrea Sutcliffe documents how Rumsey and Fitch struggled with the same challenges at exactly the same time. With modest backgrounds and limited funds to finance their experiments, both men pursued the same wealthy targets at a time when the nation was broke from years of war.

Fitch even approached Washington for support less than

a year after Rumsey had procured his valuable certificate. Washington rebuffed Fitch and instead tipped off Rumsey that he should get a move on his invention or lose out to others who were advancing rapidly.

“That’s part of the tragedy of this,” said Sutcliffe in a recent interview. “So much of their time and energy went into battling each other.”

Two centuries later, the battle scars remain. Shepherdstown legend has it that Fitch stole Rumsey’s ideas by spying on him through a keyhole. Others suspect that Fulton never considered building a steamboat until a chance encounter with Rumsey. But Shepherdstown historian Nick Blanton dismisses these unsubstantiated stories.

“I think the crux of the problem is that if you just go up to somebody and say ‘steamboat’ they can’t just go ahead and build one,” Blanton said in a recent lecture at Shepherdstown’s historic Entler Hotel. “You actually have to kind of know what you’re doing to go about trying to build one. And Rumsey’s and Fitch’s and Fulton’s steamboats really don’t share anything at all in design.”

Rumsey pioneered jet propulsion to move his boat, in which steam essentially powered a pump that drew river water into a cylinder and then pushed it back out again to move the boat forward. Fitch relied on a system of side paddles or

oars powered by steam. Fulton moved the paddle to the stern, creating the familiar paddlewheel design of Mark Twain fame.

Despite their differences, Rumsey and Fitch achieved technological, if not commercial, success within months of each other. Fitch demonstrated his boat before members of the Constitutional Convention on the Delaware River in Philadelphia in August of 1787, more than three months before Rumsey launched his on the Potomac in Shepherdstown.

When the United States finally established its first Patent Office in 1790, Fitch and Rumsey rushed to apply, undoubtedly hoping to resolve their dispute once and for all. But even the Patent Office couldn’t decide. It awarded simultaneous and identical patents to Rumsey, Fitch, and two lesser-known competitors, John Stevens and Nathan Read. Not surprisingly, this satisfied no one.

A Dream Unfulfilled

But Rumsey had little chance to prove himself after that. In 1792, while in England to raise additional money, he died unexpectedly, leaving behind a wife, three children, and a mountain of debt accumulated over years of expensive experimentation. His destitute family did what many people in Virginia did in those days: they moved to Kentucky where land was free. There, 20 years later, they watched as



In the 1780s, Philadelphia silversmith John Fitch (left) and Shepherdstown engineer James Rumsey competed fiercely to patent and introduce the steamboat. Art © Jeff Pierson

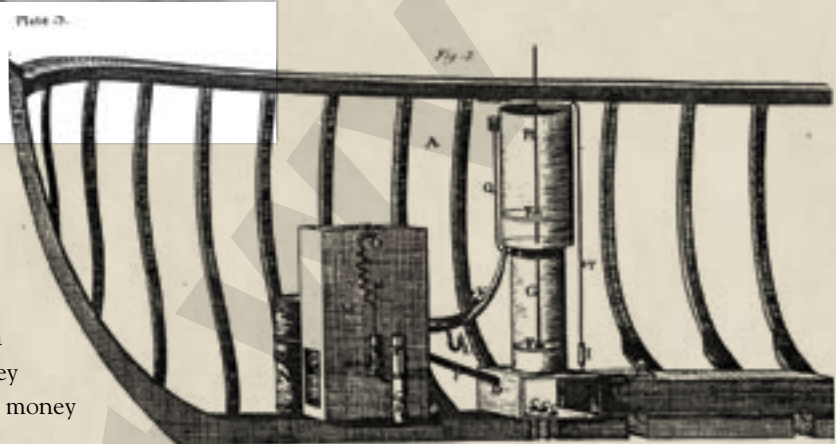




◀ **This is a model** of John Fitch's proposed steamboat. Fitch used a system of side paddles powered by steam. Library of Congress, LC-F8- 39522 [P&P]

▶ **A replica of the** Rumsey steamboat, built by local Shepherdstown craftsmen, plied the Hudson River in Clermont, New York, in 2007, for the 200th anniversary of Robert Fulton's successful steamboat demonstration. © Joel Garner

▼ **This illustration from James** Rumsey's pamphlet "Explanation of a Steam Engine," dated August 30, 1788, shows Rumsey's placement of a steam engine in a boat hull. Courtesy of The Rumseian Society



Fulton's steamboats chugged profitably up the Mississippi River.

It must have been devastating, Blanton explained: "Here we have people separated from home, tragedy in their lives, and periodically they have to step onto a steamboat and watch all the money changing hands, thinking that's not really fair."

So in the 1830s, Rumsey's family did something else that destitute families did at the time: they applied to Congress for a memorial. Memorials were acts of Congress that provided support to families of Revolutionary War veterans or others who had contributed to the service of the country. The Rumsey family hired a lawyer to shepherd the request through Congress and interview old-timers who had witnessed Rumsey's 1787 demonstration.

Unfortunately, the old-timers got the dates wrong. At least one of them claimed he saw the boat in 1783, a full four years before Rumsey's successful demonstration. Despite this impressively early—if dubious—date, Congress rejected the Rumseys' plea.

Others continued to carry the Rumsey torch through the remainder of the nineteenth and into the early twentieth centuries. One in particular, a pugnacious local lawyer from nearby Charles Town named George Beltzhoover, raised enough money to erect a monument to Rumsey in 1915. To make his case, Beltzhoover relied on those old eyewitness accounts recorded by the Rumseys' lawyer, placing undue emphasis on the year 1783, even while referencing Rumsey's own letters that said he didn't start building his boat until 1785. According to Blanton, Beltzhoover decided that 1783 was a valid date simply because it was earlier.

No matter whose side people choose, in reality, no invention truly has a single inventor. Each builds upon the ideas of those before him. Dan Tokar, a Shepherdstown blacksmith

who devoted years to building a modern replica of Rumsey's steamboat, notes that "at last count, at least seven different people could legitimately claim to have invented the steamboat." In fact, an inventor named Johnathan Hulls obtained an English patent for a steamboat as early as 1736.

The Henry Ford of Steamboating

Typically, the inventor who gains commercial success is the one recognized by history. "We describe Fulton as the Henry Ford of steamboating," says Jay Hurley, who owns O'Hurley's General Store in Shepherdstown and who mobilized local artisans and oversaw the replica's design. "Henry Ford didn't invent the automobile, he simply brought it within the reach of everybody. And so did Robert Fulton, about 20 years after Rumsey did his demonstration."

So how did Fulton do it? He managed to export a Boulton and Watt steam engine (used only in mills and mines at the time but unquestionably the most technologically advanced steam engine in the world) out of England in 1805. Both Rumsey and Fitch had coveted these engines in their day but were unable to overcome England's protectionist export policies. With loads of money acquired as a defense contractor in England's battles with France, powerful New York connections, and Rumsey's and Fitch's failures to build on, Fulton was able to bring all the pieces together.



Despite Fulton's success, Sutcliffe feels that "of all of them, Rumsey was the really brilliant inventor." Blanton agrees. Rumsey, he says, "had original ideas that were actually extremely useful." A mill and canal engineer by trade, Rumsey was a passionate creator throughout his career, advancing the thinking in hydraulic mechanics and earning four British patents for dozens of inventions.

Perhaps it's this spark of genius that keeps Shepherdstown hooked. Historians such as Blanton have debunked local legends of industrial espionage, but no matter. The Rumsey replica remains safely stowed in the tiny boathouse behind the Entler Hotel. The James Rumsey Bridge still greets visitors entering town. And perhaps most importantly, on a bluff overlooking the Potomac River, George Beltzhoover's 1915 monument to Rumsey still stands, his words celebrating the "first successful application of steam to the practical purposes of navigation" etched indelibly on a bronze plaque, forever saluting the dubious date of 1783. 🍷

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► **This monument in Shepherdstown** honors James Rumsey as the real inventor of the steamboat. © Clayton Spangler

