

Brownsville's Steamboat *Enterprise* and Pittsburgh's Supply of General Jackson's Army

by Alfred A. Maass

The *Enterprise*, built in Brownsville, Pa., earned fame as the first steamboat to descend the Mississippi and return, but its trip has been overshadowed by years of inaccuracies and myths. The true story is more interesting than the fictional accounts.

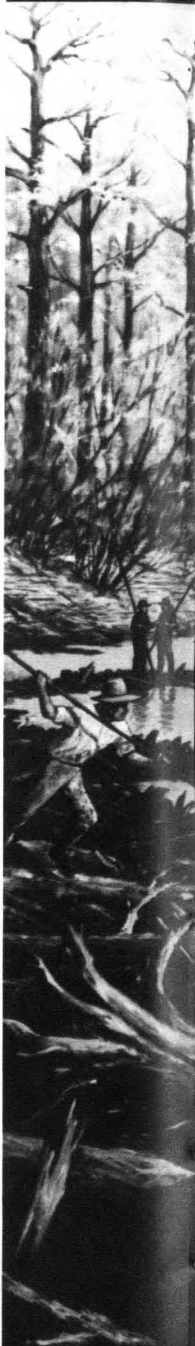
MANY LEGENDS surround the history of transport on America's inland rivers, ranging from the remarkable canoe treks of the early explorers to Mark Twain's *Life on the Mississippi*. The significance of the river highway in the settlement and economic development of the West has enhanced the romantic flavor of river history and perpetuated these stories.

One of these legends has as its subject Captain Henry M. Shreve. Captain Shreve commanded the steamboat *Enterprise* on the first successful round trip of a steamboat between Pittsburgh and New Orleans in 1814-15. Shreve, captain of a distinguished series of river steamers, and described as inventor of a system for removing obstructions from river bottoms, became a hero to people in the Mississippi River basin for his work as superintendent of the Western Rivers Improvement — in fact, the town of Shreveport, La., was named in his honor.

Shreve's early voyage to New Orleans and back was as epoch-making in its setting as was Fulton's earlier voyage in the *Clermont* up and down the Hudson. That the *Enterprise* was involved in the Battle of New Orleans in early 1815 has only enhanced her fame. But the details of this event have given rise to a legend which, since it glorifies Captain Shreve, plays down the remarkable performance of a prototypical river steamboat, the *Enterprise*.

Before setting the account straight, allow me to quote the version of these events appearing in 1848, written 30-odd years after their occurrence. A St. Louis politician at the time, Samuel Treat, wrote a biography of Shreve for the *Democratic Review*¹ in which he stated:

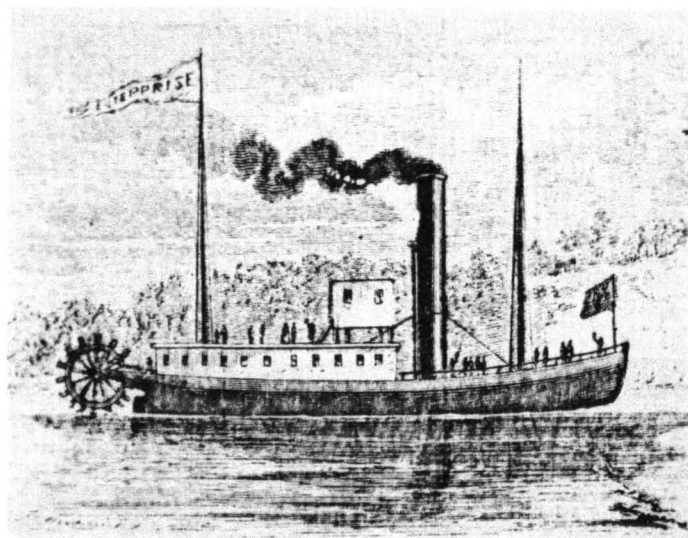
Alfred Maass earned a Ph.D. in biochemistry in 1950 and worked in pharmaceutical research until his retirement in 1982. Since then, he and his wife have worked on their Butternut Tree Farm in northeastern Pennsylvania, winning several awards in conservation and forestry for outstanding tree farm management. He adds, "As an intellectual challenge in retirement, I have researched the construction of early western steamboats and I've reported on my research at local history conferences."





"Captain Henry M. Shreve Clearing the Great Raft from Red River, 1833-38," by Lloyd Hawthorne (1970; original oil painting in color). Shreve was captain of the *Enterprize*, but earned greater fame and respect for clearing western rivers of blockages (called "rafts").

The site of Daniel French's shop in Brownsville, (below) where the *Enterprize* was built, was commemorated with a wall painting in 1976 by local artist Dale Guesman. The building, a replacement of the original on Water Street, is adjacent to the Brownsville Wharf. This depiction shows at least one inaccuracy: the paddle wheel should not be overhung, but rather recessed into the boat's body. The drawing of the *Enterprize*, (right) originally published in 1873, also shows an incorrect paddle wheel.



She [the *Enterprize*] was then loaded with ordnance and military stores for General Jackson's army; and... was placed under his [Captain Shreve's] charge. About two months previous, three keelboats had been also loaded at Pittsburgh with small arms for the same army, but permitted to trade by the way — a strange contract, which endangered the safety of New Orleans, then threatened by General Pakenham's expedition. On the 1st of December, 1814, Capt. Shreve left Pittsburgh, in command of the small steamer. He felt a double anxiety in the success of his enterprise. Not only was it his first in a steam vessel, but... it was of vast moment that Gen. Jackson should receive his military supplies, without delay; and in fourteen days they were safely landed in his camp.... [H]e was ordered to proceed as rapidly as possible up the Mississippi and tow down the long delayed keel-boats. He was absent six and one-half days, during which time his little steamer had run 654 miles; and then returned to New-Orleans with the small arms and ammunition so much needed.... On [January] 3rd, he received notice that the Commander-in-Chief desired him... [to] bear supplies to Fort St. Philip.... The British were encamped several miles below the city, and had erected heavy batteries so as to command the river entirely.

That evening, the steamer was run down to the Scud just above the British batteries. The side most exposed had been completely covered with cotton bales, fastened securely to the vessel with iron hooks. By midnight, as is usual there, a dense fog covered the river, and screened all objects from view. Taking advantage of that circumstance, Capt. Shreve put his steamer in motion, under 'a slow head of steam,' with muffled wheel; the strictest silence having first been enjoined on the crew. As anticipated by him, he passed wholly unobserved by the sentries on the shore, at a signal from whom his vessel would have been shattered into fragments. Reaching the Fort in safety, he discharged his freight, and on the next night repassed the batteries, undiscovered.... This daring exploit excited the greatest admiration in Gen. Jackson's camp and received his marked commendation.

This story, repeated in subsequent biographies of Shreve,² has been accepted as a true account of this historic mission.

Why should this account be questioned? Why not let Captain Shreve's reputation stand as one of the heroes of the battle of New Orleans?

Building a Boat

The fictional aspects of Treat's account become apparent when we examine what is known of the movements of the *Enterprize* and other early steamboats on the western rivers. Further, research into General Andrew Jackson's supply problems during the battle for New Orleans and into the methods by which Army officials in Pittsburgh attempted to solve them, lead to a different and verifiable history, which is equally as fascinating as Treat's version. The western river steamboat, a unique technological achievement, a system beautifully adapted to its environment, should be carefully documented and need not have its history distorted by false heroics.

The movement of excess produce downriver from Pittsburgh and the surrounding countryside was contributing significantly to the prosperity of the area. The loaded arks, barges and flatboats,

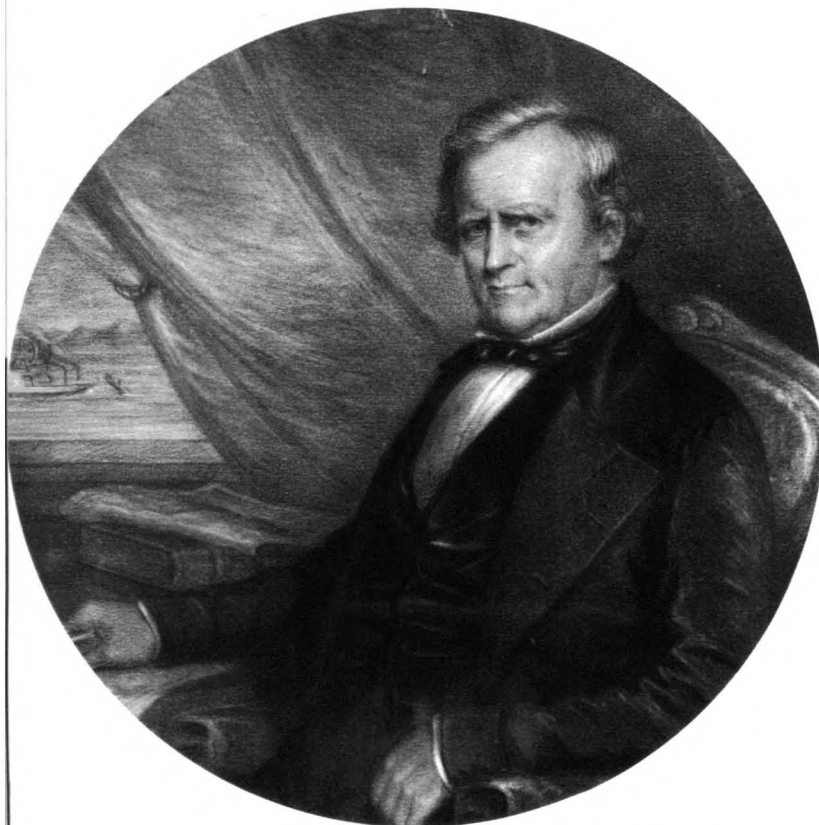
having made the monthlong voyage to New Orleans, were abandoned, being utilized for the timber in them. Keelboats,³ especially constructed for the upriver voyage, were sailed when the wind was in the right quarter, or were rowed, poled and towed by human strength upriver, frequently requiring three months in passage. It was readily apparent that if this upstream commerce could be speeded by the utilization of steampower, that great opportunities existed, for the transport of eastern goods across the mountains was equally difficult and costly.⁴

Steamboats were new on western waters. Fulton's "Pittsburgh" boat, built there in 1811 and called the *New Orleans* after its destination, was the first steamboat to descend the rivers.⁵ Followed downriver by the *Vesuvius* in 1814, neither boat, built with deep draughts, could readily pass the barrier of the falls of the Ohio at Louisville and thus could not reach Pittsburgh. This important breakthrough was reserved for the *Enterprize*, and it would set a precedent for future boat construction.

The *Enterprize*, as identified by Treat, was indeed a small steamboat, for she was intended to trade between Pittsburgh and Louisville. Compared to the 371-ton *New Orleans* or the 340-ton *Vesuvius*, whose carrying capacity was approximately one-half of their tonnage,⁶ the *Enterprize* had a carrying capacity of only about 30 tons.⁷ Built at Brownsville, Pa., during the fall and winter of 1813⁸ by a group of Quaker entrepreneurs,⁹ she began her maiden voyage to Louisville in June 1814.¹⁰ Her enrollment record is missing, but based upon an eyewitness account, she was probably 60 to 80 feet in length by 15 feet in breadth,¹¹ possibly with an 8-foot depth of hull. Her draught, fully loaded, was less than 2 1/2 feet.¹² The boat was constructed under the supervision of Daniel French and Israel Gregg, following the design patented by French in 1809.¹³

The *Enterprize*, a recessed stern-wheel boat with an oscillating cylinder (19 1/2-inch diameter with a 3-foot stroke, operated under 60 pounds steam pressure per square inch on her piston,¹⁴ making 24 strokes per minute), was capable of driving downstream at 10 miles per hour or upstream at 3-4 miles per hour.¹⁵ She was unique in many respects: Fulton's boats were all side wheelers. The stern wheel was a marked advantage for a boat in the western rivers, filled as they were with snags and sawyers that frequently destroyed the unprotected side paddle-wheels. Moreover, while the Fulton engines had a complicated power train and heavy beam to convert the piston stroke of the vertically mounted low-pressure cylinder to the side paddle wheels,¹⁶ French's oscillating cylinder, mounted almost horizontally, was directly connected through the piston rod to the crank of the stern paddle wheel.¹⁷ This highly efficient power train, along with the use of high pressure steam, provided a significantly different engine and steamboat than the Fulton boats.

The engine, as constructed by Daniel French, employing a very simple and ingenious valve gear, was declared to have one-tenth the total parts and less than one-half the moving parts of the Fulton engines. In addition, the high-pressure cylinder was lower in weight and simpler and less costly to construct than the massive Fulton low-pressure cylinders. With the working of the engine improving the fit of the cylinder, with its ease of opera-



When Henry Miller Shreve was 3, his family moved to near Brownsville, between the Youghiogheny and Monongahela rivers, where he fell in love with river travel. Shreve's accomplishments would earn him the honor of having Shreveport, La., named for him.

tion and repair, French's engine was peculiarly suited for use in the western country, and an immense improvement over Fulton's boats.¹⁸ This was proved by the *Enterprise's* routine trips from Pittsburgh to Louisville, carrying passengers and freight, during the summer of 1814.¹⁹

The War of 1812

While steamboat commerce on the rivers was undergoing its birth and infancy, the War of 1812 was disrupting trade and industry in the East and bringing the federal government almost to a state of chaos.

During the fall and winter of 1813, and on into the spring of 1814, General Jackson campaigned against Creek Indians stirred up by the British.²⁰ His battles in the South exacerbated the already formidable problem of supply²¹ of the American forces fighting the British along the Canadian border from the Atlantic Ocean to the Great Lakes. With British ships firmly in control of the high seas from Maine to the Gulf of Mexico, the Ohio and Mississippi rivers offered the only feasible route to supply Jackson's southern army.

As urgent as the supply of arms became, there was no easy solution. There were no steamboats at Pittsburgh to speed the transport of munitions. The *Vesuvius* made its maiden voyage to New Orleans in the Spring of 1814, and in attempting to return to Louisville that summer, she became stuck on a sandbar 300 miles below the mouth of the Ohio River.²² She finally floated free on a rise of the river in December and returned to New Orleans.²³ The *Aetna*, under construction at Pittsburgh, would not be launched until the Spring of 1815.²⁴ The only steamboat afloat at the time was the *Enterprise* which was trading at Charleston, Va. (now Wellsburg, W.V.) some 75 miles below Pittsburgh.²⁵

There was, moreover, no assurance that a steamboat could make better time downstream than the conventional keelboat. A steamboat had the advantage of navigability since, moving faster than the current, her rudder provided greater control than that available to the keelboat. But what was gained in maneuverability was lost in maintenance. The steamboat had to stop for the crew to cut and load firewood, losing valuable travel time.²⁶ The absence of fixed fueling stops at this early stage of steamboating left the crew highly dependent upon finding a good fuel source, ash or dry mulberry, or trying to steam with green wood.

Indeed, the *Enterprise*, having a high-pressure engine, consumed much more wood than the conventional low-pressure engine²⁷ used on the Fulton boats. Moreover, to replace the water lost by not condensing the steam required her boiler to be filled with muddy river water. Thus she was forced to stop and frequently clean her boiler or struggle along with reduced steam pressure.²⁸ The significance of these unknowns was yet to be appreciated at that time.

In response to General Jackson's pleas,²⁹ Secretary of War Monroe strove to support the southern defenses; he restored the credit of the government by sending \$100,000 in treasury notes to Governor Blount of Tennessee,³⁰ and on November 2, ordered 5,000 stand of arms with ammunition from Pittsburgh to be sent to General Jackson.³¹

In response to Jackson's appeal and amid the rumors of a British attack upon New Orleans slowly trickling upriver, two individuals in Pittsburgh acted with commendable competence and dispatch to send supplies to Jackson downriver. One was William Barclay Foster, a prosperous and influential merchant,³² who was commissioned as deputy commissary general for purchasing; the other was Capt. Abram R. Woolley, first commanding officer³³ of the newly established Allegheny Arsenal in the Lawrenceville section of Pittsburgh.

From Fort Fayette, Capt. Woolley wrote to Jackson in November 1814, "I have caused to be delivered to the Q. Master Dept. 5000 stand of arms with accouterments, flints, etc and 300,000 musket cartridges to be forwarded with the least possible delay to Baton Rouge, which place I presume they will reach in 20 or 23 days from this date..."³⁴

The arms ordered by Secretary Monroe left Pittsburgh in three barges or keelboats (these terms tending to be used interchangeably), on November 11, 14 and 15, commanded respectively by captains Ansel Lewis, Thomas Marples and Jacob Smith.³⁵ The entire shipment was the responsibility of Captain Marples.³⁶ Marples's boat was delayed at the mouth of the Scioto River until November 25 to receive arms and munitions from the federal deposit at Franklinton, Ohio.³⁷ However, by Captain Woolley's estimate, these too large gutter boats should have reached Baton Rouge before the middle of December.

Reinforcements had also been requested. The Tennessee militia mustered at Nashville and Knoxville in mid-November. By November 20, transport was obtained and with Major General Carroll in command, the second division was on its way downriver on flatboats. Carroll arrived in Natchez on December 14 and reported that a keelboat, commanded by Captain Ansel Lewis and freighted with 1,400 stand of arms and ammunition, had been intercepted by them.³⁸ Carroll armed his men with these muskets but complained that the accouterments, flints, etc., were missing, possibly in one of the other keelboats still coming downriver. With these muskets, the Tennessee troops reached New Orleans in time to help in its defense against the initial British attack on December 23.³⁹

The credit of the government was equally as bad in the North as in the South.⁴⁰ Foster, by the end of September, had advanced \$15,000 of his own money to purchase supplies when contractors refused to sell to the government on credit.⁴¹ Morrison Foster, in his biography of the William B. Foster family, described his father's response to Monroe's request: "When an urgent call came for supplies and munitions for Andrew Jackson's army at New Orleans, and there was no money with which to purchase them, Foster himself purchased the munitions (and) loaded them on the steamboat *Enterprize*."⁴²

Foster and Woolley, indeed, did their best. It is not known whether Foster requisitioned the *Enterprize*, but when she reached her home port of Brownsville on December 10,⁴³ after steaming upstream from Steubenville, the command was given to Shreve, a native of Brownsville and an experienced keelboat captain. Although this was Shreve's first command of a steamboat, his frequent trips down the Ohio and Mississippi rivers as keelboat cap-

tain had given him an extensive and current knowledge of the character of the rivers and of their obstructions to navigation, especially at times of low water.

The *Enterprize* returned to Pittsburgh by December 15, 1814,⁴⁴ and was loaded with a cargo of "cannon-balls, gun-carriages, smith's tools, boxes of harness, &c.," and left Pittsburgh December 21.⁴⁵ Her normal 30-ton burden was undoubtedly increased by utilizing her passenger space for additional freight storage. Even so, her carrying capacity was considerably less than that of the barges and keels, 80 to 100 tons, being sent simultaneously⁴⁶ from Pittsburgh.

Keelboats starting from Pittsburgh generally required 10 days to reach the falls at Louisville, and 15 days to reach the mouth of the Ohio, "depending upon the condition of the river and the character of the weather which prevailed."⁴⁷ The *Enterprize* crossed the falls of the Ohio December 28,⁴⁸ eight days from Pittsburgh, or in about the same time she required on her maiden voyage to Louisville earlier in the year. Considering the difficulties of traveling the river in December, with low water, floating ice and the shortness of daylight for her travel,⁴⁹ she made a quick trip. Upon reaching the mouth of the Ohio she was finally free of floating ice and by then was far enough south for a significant increase in daylight travel. The *Enterprize* reached New Orleans on January 9, 1815,⁵⁰ the day after the battle of New Orleans.

Despite the glorious victory of January 8, Jackson was more and more frustrated at the lack of arms to equip his forces, for it was still not clear what the British would undertake next. Jackson wrote Governor Holmes of Mississippi for help, angrily complaining that the keelboats supposedly coming downriver to supply him with arms had not arrived; this was finally accompanied by the threat: "Having the man who had been entrusted with the transportation of them arrested, and sent to me in confinement."⁵¹

With the arrival of the *Enterprize* on January 9, Jackson had another option open to him which he immediately seized. An officer on board the *Enterprize* wrote from Natchez on January 20, 1815: "When we arrived at New Orleans we were immediately pressed by General Jackson⁵² and are now in search of some boats loaded with U. States Arms."⁵³ Since the upstream time for a steamboat from New Orleans to Natchez at that time was seven to eight days, (although the *Enterprize* would later make the trip in four days) the *Enterprize*'s presence in Natchez on January 20 places her departure from New Orleans about January 14.⁵⁴

The *Enterprize* went upriver to Natchez, looking for the missing keelboats, but the needed guns and ammunition arrived only after the battle was won — in fact, Jackson sourly commented to Secretary Monroe in February "the supply of arms, will arrive when the danger is passed."⁵⁵

According to Treat, Shreve was also ordered by General Jackson to take supplies to Fort St. Philip, below the British lines to New Orleans. However, since Fort St. Philip was unchallenged on January 3, there was no need to send the *Enterprize* with supplies.⁵⁶ When supplies were sent to Fort St. Philip on January 15, the *Enterprize* was on its way to Natchez searching for the long delayed keelboats.

Important Trip

Why did this exaggeration of the historical facts gain such currency when the truth is much more elegant? In 1848, Shreve, who had continued a distinguished career as a steamboat captain, was famous all along the Mississippi and Ohio river system for using snag boats to free the river channels of snags and sawyers, thus protecting the great steamboats then enjoying the peak of their popularity as a transport system. Between 1833 and 1837, Shreve cleared a 200 mile raft of dead wood from the Red River in Arkansas. In spite of his past accomplishments and his reputation as a steamboat captain and inventor, Shreve, a Democrat, was fired as superintendent of the Western Rivers Improvement. With a change to a Whig administration, he applied to the federal government for compensation for his invention of the snag boat. Treat, when he wrote his laudatory and somewhat fanciful biography, was helping a friend, successfully as it turned out, Shreve's heirs⁵⁷ being awarded \$50,000 compensation in 1854.⁵⁸

In January 1815, the Battle of New Orleans was won — an unnecessary victory as it turned out, for the War of 1812 was over by that time. The role of the *Enterprize* in supplying General Jackson was certainly not vital to that victory. But from that year onward, the shallow draft, stern-wheel steamboats, powered by increasingly efficient high-pressure engines, fueled first by wood and then by coal and oil, became an increasingly common sight on all the midland rivers: the Monongahela, the Allegheny, the Ohio and its tributaries, the Mississippi and the Missouri.

The voyage, though, was revolutionary in yet another way. Until this time, Fulton's interests had a monopoly on steamboating on the lower Mississippi, so the arrival of the *Enterprize* set off a series of legal battles. Most westerners were eager to see the monopoly broken so as to free up steam travel on the river. In 1816, a Louisiana state court ruled the monopoly nil, establishing free and open navigation on the Mississippi's waters.⁵⁹ A new era had begun. ☉

Notes

¹ Samuel Treat, "Political Portraits in Pen and Pencil: Henry Miller Shreve," *United States Magazine and Democratic Review* 22 (Feb. 1848): 159-171 and 22 (March 1848): 241-251.

² An account based upon primary references has been lacking, although the events frequently have been described using Treat's secondary account. See Frederick Brent Read, *Up the Heights of Fame and Fortune and the Routes Taken by the Climbers to Become Men of Mark* (Cincinnati, 1873); J. Fair Hardin, "The First Great River Captain: A Sketch of the Career of Henry M. Shreve," *Louisiana Historical Quarterly* X (1927): 25-67; Caroline S. Pfaff, "Henry Miller Shreve: A Biography," *Louisiana Historical Quarterly* X (1927): 192-240; Florence L. Dorsey, *Master of the Mississippi* (Boston, 1941); Charles B. Brooks, *The Siege of New Orleans* (Seattle, 1961); William J. Petersen, *Steamboating on the Upper Mississippi* (Iowa City, 1968); Samuel Carter, *Blaze of Glory, The Fight for New Orleans 1814-1815* (New York, 1971); John K. Mahon, *The War of 1812* (Gainesville, Fla., 1972); and Edith McCall, *Conquering the Rivers: Henry Miller Shreve and the Navigation of America's Inland Waterways* (Baton Rouge, La., 1984).

Many other authors have accepted portions of the Shreve legend, including Louis C. Hunter, *Steamboats on the Western Rivers* (Cambridge, 1949), 551-552. In another analysis, Hunter thoroughly discredits Treat's account of Shreve's inventions in steamboat and steam engine design. See Louis C. Hunter, "The Invention of the Western Steamboat," *Journal of Economic History* 3 (1943): 201-224.

³ Leland D. Baldwin, *The Keelboat Age on Western Waters* (Pittsburgh, 1941).

⁴ Brownsville, Pa., *American Telegraph* 26 (Aug. 1815).

⁵ The *New Orleans* sank near Baton Rouge, La., in July 1814, and was not present

during the campaign for New Orleans. *Louisiana Gazette* 26 (July 1814).

⁶ Hunter, in her *Steamboats on the Western Rivers*, 82, cites the *Cincinnati Gazette*, 23 Sept. 1816, and the *Pittsburgh Commonwealth*, 14 Feb. 1816.

⁷ Daniel French correspondence to Jacob Bowan, 14 Oct. 1815. Larwill Family Papers, Ohio Historical Society. *Cincinnati's Western Spy*, 20 Oct. 1815, also states that the *Enterprize* could carry approximately half of her tonnage — or about 60 tons.

⁸ Zadok Cramer, *The Navigator*, 8th ed. (Pittsburgh, 1814), 42; and *Pittsburgh Magazine and Almanack for the Year 1814*, 68.

⁹ "List of those who compose the Monongahela and Ohio Steam Boat Company," Calendar of the Mississippi Set, 14 Feb. 1816, LeBoeuf Collection, New York Historical Society.

¹⁰ *Pittsburgh Gazette*, 10 June 1814.

¹¹ Benjamin Henry Latrobe correspondence to Robert Fulton, 9 June 1814. See Edward C. Carter and Thomas E. Jeffrey, eds., *The Guide and Index to the Microfiche Edition of the Papers of Benjamin Henry Latrobe*, published for the Maryland Historical Society (Clifton, N.J., 1971). (Hereafter "microfiche edition.")

¹² Benjamin Henry Latrobe correspondence to Robert Fulton, 9 June 1814, microfiche edition.

¹³ Daniel French patent, "Improvements in the Steam Engine Applicable to Boats, Mills, etc.," issued 12 Oct. 1809. Calendar of the Mississippi Set, LeBoeuf Collection, New York Historical Society.

¹⁴ Oliver Evans correspondence to Judge Richard Peters, 8 Sept. 1814, incorporating a letter from his son George Evans. Judge Richard Peters Manuscript Collection, Historical Society of Pennsylvania, 11: 50.

¹⁵ Baltimore *Nile's Weekly Register* 6 (July 9, 1814): 320.

¹⁶ Cedric Ridgley-Nevitt, *American Steamships on the Atlantic* (Newark, Del., 1981), 19, has a drawing of the diagrammatic arrangement of Fulton's bell crank engine. Samuel Ward Stanton, "A History of the First Century of Steam Navigation," *Nautical Gazette* 73 (29 Aug. 1907): 144, also displays a drawing of the gearing used by Fulton's *Clermont*. The complexity of operation of Fulton's vertical cylinder engine is described by Edouard de Montoule, *Travels in America 1816-1817*, translated from the original French edition of 1821 by Edward D. Seeber (Bloomington, Ind., 1951), 102. Montoule traveled on the *Vesuvius* during his visit to the United States in 1816.

¹⁷ Daniel French's patent application. See "Propulsion of Vessels," 1791-1810.

"Drawings and specifications of inventions for the propulsion of vessels by steam, horse, spring, and man power," presented by Robert Fulton Schuyler for the heirs of Robert Fulton, 19 April 1845, with certificate of the U.S. Dept. of State on 14 April 1845 (n.p. 1845), U.S. Patent Office Library.

¹⁸ The *New Orleans* and the *Vesuvius* had cylinders of 34- and 36-inch diameters, many times the weight and bulk of the 19 1/2 inch diameter cylinder used on the *Enterprize*. See *Cincinnati's Western Spy*, 17 Feb. 1816.

¹⁹ *Pittsburgh Gazette*, 2 April 1819.

²⁰ Frank L. Owsler, *Struggle for the Gulf Borderlands: The Creek War and the Battle of New Orleans, 1812-1815* (Gainesville, Fla., 1981), 2.

²¹ Erna Risch, *Quartermaster Support of the Army: A History of the Corps, 1775-1939* (Washington, D.C., 1962), 161, 175.

²² Louisville, Ky., *Western Courier*, 12 Sept. 1814, and New Orleans's *Louisiana Gazette*, 21 Aug. 1814.

²³ Starting downstream on 3 Dec. 1814, the *Vesuvius* reached Natchez on Dec. 13. (Natchez, La.) *Mississippi Republican*, 14 Dec. 1814. With three days steaming she reached New Orleans on the 16th to be "pressed" by Gen. Jackson's proclamation of martial law, according to the *Mississippi Republican*, 21 Dec. 1816. An extract of the general orders of Dec. 16 reads: "No vessels, boats, or other ships will be permitted to leave New Orleans or Bayou St. John without a passport in writing from the General, etc." It is signed Robert Butler, Adjutant General.

²⁴ *Pittsburgh Gazette*, 2 April 1819.

²⁵ Benjamin Henry Latrobe correspondence to Robert Fulton, microfiche edition, 9 Aug. 1814.

²⁶ Maxine Benson, ed., *From Pittsburgh to the Rocky Mountains, Major Long's Expedition, 1819-1820* (Golden, Colo., 1988), 70-72.

²⁷ Harlan I. Halsey, "The Choice Between High-Pressure and Low-Pressure Steam Power in America in the Early Nineteenth Century," *Journal of Economic History* XLI (Dec. 1981): 723-744.

²⁸ Benson, ed., *From Pittsburgh to the Rocky Mountains*, 41.

²⁹ Andrew Jackson correspondence to Secretary Monroe, 16 Dec. 1814, 2 and 3 Jan. 1815, in John Spenser Bassett, ed., *Correspondence of Andrew Jackson* (New York, 1969 [reprint, 6 vols.]), vol. II, 1 May 1814-31 December 1819, 115-116, 130, and 130-131.

³⁰ Secretary Monroe correspondence to Andrew Jackson, 27 Sep. 1814; Andrew

Jackson correspondence to the president and directors of the Nashville Bank, 11 Oct. 1814; and Andrew Jackson to Secretary Monroe, 26 Oct. 1814 in Bassett, ed., *Correspondence*, vol. II, 62, 72, and 82-83. Harold D. Moser, ed. et. al., *Papers of Andrew Jackson* (Knoxville, 1991), vol. III, 175, "In response to pleas from Jackson and Willie Blount the Nashville Bank had advanced \$50,000 and the Planters' Bank of New Orleans, \$10,000 with a promise of additional funds."

³¹ Henry Adams, *History of the United States of America during the Administration of James Madison* (New York, 1986 [reprint, 2 vols.]), 1138, citing correspondence of Secretary Monroe to Hugh L. White, 9 Feb. 1827.

³² *Pittsburgh Gazette*, 5 Nov. 1806. William Barclay Foster is better known as the father of Stephen Foster. Evelyn Foster Morneweck, *Chronicles of Stephen Foster's Family* (Pittsburgh, 1944), 5-6, and Clarence Edward Macartney, "Prominent Pittsburghers of 1840-1850," *Western Pennsylvania Historical Magazine* [hereafter *WPHM*] 28 (March-June, 1945): 45.

³³ American State Papers: Documents of Congress of the United States, Class V, Military Affairs; "Register of the Army for 1813," (publisher unknown, 14 volumes), vol. I, 386, and Edward M. McKeever, "Earlier Lawrenceville," *WPHM* 5 (1922): 279, quoting a communication from Adjutant General P.C. Harris of the War Dept., Washington, D.C., 15 Aug. 1921.

³⁴ Captain Wooley correspondence to General Jackson, 3 Nov. 1814, in Bassett, ed., *Correspondence*, vol. II, 113n.

³⁵ Maj. Abraham Edwards, Deputy Quartermaster General, to Secretary Monroe, 11 Feb. 1815, National Archives, DNA-RG 107, "Letters Received by the Secretary of War, Unregistered Series, 1789-1861," E-1815, microfilm 222, reel 15; containing a "Report of the Departure of Boats Loaded With Munitions of War, from this place [Pittsburgh] to Baton Rouge and New Orleans and the Names of Persons in charge of the stores."

³⁶ Maj. A. Edwards to Secretary Monroe, 11 Feb. 1815, containing a "True copy of a Receipt signed by Thomas Marples for supplies to be delivered to the Commanding Officer, Baton Rouge," National Archives, DNA-RG 107.

³⁷ National Archives, "Ordnance Transfers from Franklinton to New Orleans," 4 Nov. 1814. See also Samuel Cummings, *The Western Pilot* (Cincinnati, 1847), 33.

³⁸ John Reed and John H. Eaton, *The Life of Andrew Jackson* (Philadelphia, 1817 [reprinted by the Univ. of Alabama Press, 1974]), 247-248; and Maj. Gen. Carroll to Andrew Jackson, 21 Dec. 1814, Bassett, ed., *Correspondence*, vol. II, 122. Gen. Carroll's receipt identified the boatman as Capt. Lewis, and according to Maj. A. Edwards (Ref. 35), Capt. Ansel Lewis departed Pittsburgh in his boat, bearing arms to Baton Rouge, on 11 Nov. 1814.

³⁹ The *Vesuvius* also participated in the campaign for New Orleans and details of her movements may have contributed to Treat's confusion about Shreve's activities. After being "pressed" by Gen. Jackson on Dec. 16 (see ref. 22), Capt. Clements, of the *Vesuvius*, was ordered on Dec. 19 to steam upstream to pick up Gen. Carroll's troops. Since the *Vesuvius* returned with the troops by Dec. 20, Capt. Clements must have intercepted them somewhere below Natchez, where Gen. Carroll reported his position on 14 Dec. 1814. Town of Washington, Mississippi Territory, *Mississippi Republican*, 14 Dec. 1814.

The *Vesuvius* also towed Capt. Lewis's keelboat down to New Orleans. The pertinent references are cited by Moser, et. al., *Papers*, vol. III, 485 and 503; DLC (62) from Andrew Jackson to Samuel Clements, 19 Dec. 1814; DLC (71) from Wm. Carroll to Andrew Jackson, 20 Dec. 1814; DLC (62) from Andrew Jackson to Wm. Carroll, 21 Dec. 1814; and DLC (15) from Wm. Carroll to Andrew Jackson, 25 Jan. 1815.

By means of hot shot from a land battery on Dec. 27, the British succeeded in blowing up the schooner *Caroline* which had wreaked havoc on the British lines by its enfilading fire; Town of Washington, Mississippi Territory, *Washington Republican*, 28 Dec. 1814. The *Vesuvius* was planned to replace the *Caroline* by fitting her with cannon and protecting her machinery against British shot with cotton bales suspended over her gunwales. Unfortunately, during the process of loading cannon, the *Vesuvius* was grounded on a mud bank at the batteau and remained there from Dec. 30 until a rise in the river on 12 March 1815. Thus, except for her brief service on Dec. 19 and 20, the *Vesuvius* was lost for further service; House Report #551, 1-6, 24th Congress, 1st Session, Serial Set 295.

⁴⁰ J.W. Hammock, *Kentucky and the Second American Revolution: The War of 1812* (Lexington, Ky., 1976), 100.

⁴¹ A. Brackenridge to S. Pleasonton, 7 Dec. 1822, National Archives RG-217. *Pittsburgh Mercury*, 23 Oct., 1822, placed the sum loaned by William Foster to purchase supplies

for the U.S. government as high as \$58,000.

⁴² Macartney, *WPHM* 28 (1945): 45; and Harvey B. Gaul, "The Minstrel of the Alleghenies," *WPHM* 34 (March 1951): 10-11.

⁴³ Brownsville, *American Telegraph*, 14 Dec. 1814.

⁴⁴ Gaul, *WPHM* 34 (1951): 10.

⁴⁵ Maj. A. Edwards to Secretary Monroe, 11 Feb. 1815, National Archives DNA-RG 107.

⁴⁶ Keelboats bearing munitions and military equipment were also dispatched on 3, 12, 15, and 18 Dec. 1815. See Major Edwards, 11 Feb 1815.

The barge commanded by Capt. Edward Smallman loaded with cannon carriages, round shot, 5,000 stand of arms, 8,000 lbs. of powder, 3 tons of cannon balls, etc., departed Pittsburgh Dec. 12, and arrived at the falls of the Ohio on Dec. 30. Louisville, Ky., *Western Courier*, 4 Jan. 1815. In attempting to cross the falls she lodged on a rock, but the pilot, Capt. John Nelson, maneuvered her off the mud with little or no damage and proceeded to New Orleans, where she arrived on 6 Feb. 1815. *New Orleans Wharf Register*.

On Dec. 15 a keelboat commanded by Capt. Pollard, loaded with 750 stand of arms, 200 bags of cartridges, 100 barrels of powder, and 500 and 1,000 four-, 12-, and 18-pound cannon balls, departed from Pittsburgh. She crossed the falls of the Ohio on Jan. 6. Baltimore *Nile's Weekly Register* 8 (11 Feb. 1815): 379. Capt. Pollard arrived at New Orleans 2 March 1815. *New Orleans Wharf Register*.

⁴⁷ William F. Gephart, *Transportation and Industrial Development in the Middle West* (New York, 1909), 63.

⁴⁸ Louisville, Ky., *Western Courier*, 4 Jan. 1815; and Baltimore *Nile's Weekly Register* 7 (4 Feb. 1815): 361.

⁴⁹ At 40° north latitude (Pittsburgh) in December, the nights are long and the days are short with only about nine hours and 20 minutes between sunrise and sunset. Assuming that the *Enterprise* could make the 10 miles per hour that she obtained on her speed trials on the Monongahela River in June 1814, she would make only somewhat more than 100 miles per day. Travel after dark downstream was rarely attempted in the early days of steamboating due to the reflections of the hills upon the surface of the water, obscuring the channel. Her trip would have improved at the confluence of the Ohio and Mississippi rivers, 37° 22' north latitude and with freedom from the hazard of floating ice. See Benson, ed., *From Pittsburgh to the Rocky Mountains*, 22-23, 35-36.

⁵⁰ Brownsville, Pa., *American Telegraph*, 29 March 1815. As is apparent from the footnotes above, the *Vesuvius* required 14 days to steam from a point 300 miles below the mouth of the Ohio River to New Orleans. The *Enterprise* managed to steam from Louisville (the falls of the Ohio), 300 miles above the mouth of the Ohio River, to New Orleans within 13 days.

⁵¹ Jackson to Gov. Holmes, 25 Dec. 1814, 6 Jan. and 18 Jan 1815 in Bassett, ed., *Correspondence*, vol. II, 124, 131, and 145-156.

⁵² The *Enterprise* also came under martial law upon her arrival at New Orleans on 9 Jan. 1815.

⁵³ Brownsville, Pa., *American Telegraph*, 22 Feb. 1815. Livingston, in correspondence to congressional investigators, 27 Jan. 1836, wrote, "She [*Vesuvius*] was the only steamboat on the waters, except for a little and very insignificant one that had been employed to go up the river for arms." House Report No. 3, 23 Dec. 1844, 28th Congress, 2nd Session, Serial Set #468.

⁵⁴ Capt. Shreve advertised in the *Natchez Mississippi Republican*, 1 March 1815, that the *Enterprise* would "ply between Natchez and New Orleans every nine days until the first week of May."

⁵⁵ Jackson correspondence to Secretary Monroe, 18 Feb. 1815, in Bassett, ed., *Correspondence*, vol. II, 173-175. Moser, et. al., *Papers*, vol. III, 229n, places the arrival of the arms shipment from Pittsburgh on 26 Jan. 1815. This timing is consistent with the movements of the *Enterprise*.

⁵⁶ Major A. Lacarriere Latour, *Historical Memoir of the War in West Florida and Louisiana in 1814-1815* (Gainesville, 1964 [fascimile]), 187-197, and appendix, 34. This is the most complete account of the supplying of Fort St. Phillip, including Maj. Overton's correspondence to Gen. Jackson, 19 Jan. 1815.

⁵⁷ Capt. Shreve died in St. Louis on 6 March 1851.

⁵⁸ Samuel Treat, "Note in hand of Samuel Treat" with attached clipping, c. July 1855, Missouri Historical Society, Steamboat Collection, 1811-1926, St. Louis.

⁵⁹ *Natchez Mississippi Republican*, 1 March 1815; Steubenville, O., *Western Herald*, 28 June 1816; Baltimore *Nile's Weekly Register* 14 (27 June 1818): 312.