

wheels on each side of the boat. It is surely very far from my intention to attempt to invalidate Mr. Fulton's claim to water-wheels thus applied. It is an unquestionable fact that he was the first person who, for any practical useful purpose, applied water-wheels on each side of a steamboat.

"It may not be amiss to mention that in 1807, when the North River steamboat [Fulton's *Clermont*] made her first appearance on the waters of the Hudson, I constructed an engine and boat on a very small scale, namely fifteen feet long, and four-and-a-half feet wide. To this boat, considering her size, I gave the astonishing velocity at times of not less than six miles an hour. To be sure, she had water-wheels on each side. That her extraordinary velocity was not owing to this circumstance is evident from the fact of her going, notwithstanding every disadvantage, much faster than the North River steamboat. . . ."

Concurrently with this small vessel Colonel Stevens built the *Phoenix*, which, but for the monopoly held by Livingston and Fulton, would have plied on the Hudson River. The rivalry between the *Phoenix* and Fulton's *Clermont* was close. To the credit of the *Phoenix* stands the fact that her engines were built in America, whereas those of the *Clermont* were imported from England. The *Phoenix* was excluded from New York, but the port of Philadelphia was open to her. Accordingly, by sea, to Philadelphia Robert L. Stevens took her, embarking one afternoon in June, 1808. A fierce storm was encountered. A schooner in her company was blown out to sea, and was not heard from for nearly a fortnight, but the *Phoenix* made a safe harbor at Barnegat, whence, when the storm abated, she proceeded to Philadelphia, and plied many years between that city and Trenton. Mr. Stevens thus earned the honor of being the first to brave the ocean in a craft propelled by steam.

The next steamer built by John Stevens was the *Juliana*, a ferryboat, launched in 1811. She was an undecked open boat, 62 feet in length and 12 in breadth, drawing from 2½ to 3 feet of water. Her engines were of the model patented