



A modern "Ocean Greyhound,"—made possible by Fulton's invention and energy.

A modern iron-clad. In Fulton's time sails were the warship's only motive power.

CHAPTER XXIV

Robert Fulton

1765-1815

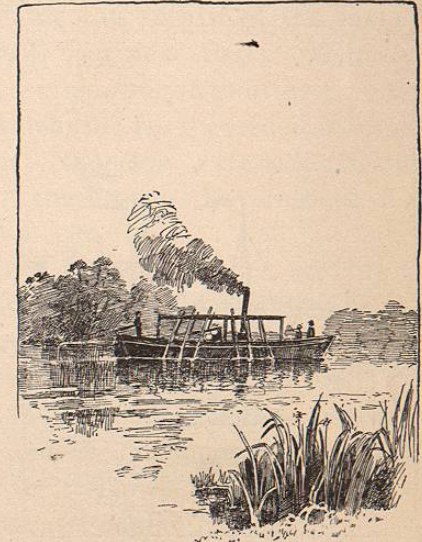
WHAT a wonderful invention was the American steamboat! Look at it to-day! The ferryboats that are constantly crossing the Hudson and the East River at New York—what could we do without them? Think what it would mean if we had no coast-line steamers from New York to Norfolk, to Savannah, to New Orleans; no elegant floating palaces plying up and down our great rivers, or between Buffalo and Duluth, or between New York and Fall River; no ocean liners, greyhounds of the sea, running with perfect regularity between this country and the ports of Europe; no steamers running with equal regularity between San Francisco and the ports of China, Japan, and elsewhere.

Passenger steamers and freight steamers are today doing a very large part of our carrying from one port to another in

our own country, and from one nation to another across the ocean.

The invention of the steamboat was a splendid triumph of genius. Like most other inventions, it was not entirely due to any one man. Many early attempts to use steam power for propelling vessels upon the water were made.

James Rumsey, of Maryland (in 1786), built a boat which was moved upon the Potomac River by steam at the rate of four miles an hour. In this boat the power was applied by forcing out at the stern a stream of water, which pushed the boat forward; the water having been taken in at the bows.



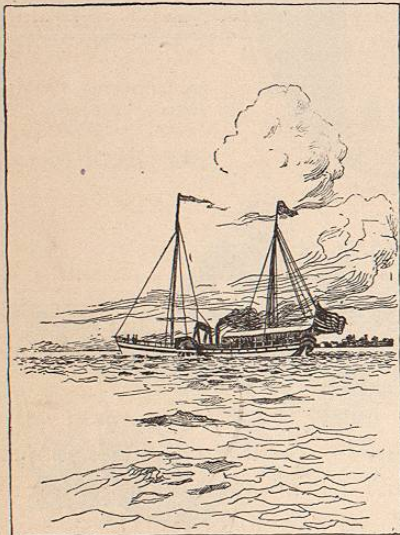
FITCH'S STEAMBOAT.

Meanwhile John Fitch, of Connecticut, experimented with his steamboat on the Delaware River. His first boat, built in the same year, was propelled by paddles, moved by steam power, at a speed of three miles an hour; this was afterward increased to eight miles.

Four years later Captain Samuel Morey, of New Hampshire, built a small boat which he navigated upon the upper Connecticut River by steam power furnished by an engine of his own make. He continued his experiments for many years; at one time we find him running his little steam-

boat upon the Delaware River, and again building another boat in New York, in which he made the passage from that city to Hartford.

For some years, at the beginning of this century, John Stevens, of New York, was engaged in experimenting with



STEVENS' STEAMBOAT.

the steamboat. All these experiments, while not entirely successful, yet gave real assistance to the inventors who followed them. The first man in this country to build a steamboat which succeeded in every way was Robert Fulton.

Robert Fulton was a native of Pennsylvania. Early in his life he showed a taste for drawing and painting. At the same time even from his childhood he was greatly interested in machinery, and particularly in new inventions. When he was twenty-one years of age Fulton went to London, carrying letters of introduction to the famous painter, Benjamin West, also a native of Pennsylvania. West received him into his family, and Fulton was under his instruction, in his favorite art, for several years.

Fulton became interested in improving canals in England, and this turned his attention toward the use of steam in propelling boats. After this, we find him a member of the fam-

ily of Joel Barlow, an American poet, in Paris. Here he made experiments with a boat to be used in torpedo warfare.

Later still he took up again the subject of steam navigation. At this time he was encouraged by Robert R. Livingston, our minister to the French court, who had already experimented in America. Livingston furnished the money with which Fulton built a small boat near Paris. When he had run his boat a few times, Fulton sought to bring it to the attention of the French government. He succeeded in awakening the interest of the great Napoleon. He was directed to give a public exhibition of the boat in the presence of a committee of learned men.

For many days Fulton kept steadily at work, seeking to make every part as perfect as possible. The day before the trial the little steamboat was ready. That night Fulton found it difficult to sleep, so much depended on the morrow. Toward morning, when he had fallen into a doze, he was awakened by a knock at the door and the message that his boat was at the bottom of the river. The iron machinery had broken through, and both boat and engine had sunk.

Perhaps this failure was a blessing in disguise. The boat was probably too small to make a successful trip. The next time he would have a larger vessel. He determined to have a steamboat built in America which he fully believed would bring success.

Livingston agreed to pay the bills, and, acting under his advice, Fulton drew a plan for an engine to be built at Birmingham, England. He now crossed the Atlantic and at New York directed the building of the first really successful steamboat in America. It was completed, the great engine was properly placed within it, and, on the 11th day of August,

1807, it left the dock at New York City and steamed up the Hudson River.

The trip to Albany, a distance of about one hundred and fifty miles, was made upon this first voyage in thirty-two hours. The steamboat was named the *Clermont*, as a compliment to Livingston, that being the name of his country seat on the Hudson.

What an interesting sight it must have been to see this



THE FIRST TRIP OF FULTON'S "CLERMONT" UP THE HUDSON RIVER.

steamboat move slowly away from the pier at New York on that first memorable trip! Everybody had said it would not move; the scheme was impossible; machinery would never carry such a heavy boat through the water. They had laughed at Fulton; they had called him insane.

It was perfectly clear to everybody that the boat would not move; yet it did move. Then they said it would not go far—it would soon stop; but on it went, at the rate of about five miles an hour over the whole distance, until it reached Albany.

Its return trip was equally successful, and through the summer and fall it continued to make regular trips back and forth between New York and Albany.

The American steamboat was invented, and from that successful attempt prodigious results have been achieved.

Tell something about Rumsey's boat; Fitch's boat; Morey's boats; Stevens' boat.

Tell the story of Robert Fulton: as an artist; as an inventor of other things besides steamboats.

Give an account of Fulton's disappointment at Paris.

Tell the story of the *Clermont*.

What advantages has a steamboat over a sailing vessel? How did Fulton's skill in drawing aid him when he gave directions for the building of his boats and engines? Do you know what a torpedo is—that is, one that is used in war? Why did Fulton wish the French government to know about his steamboat? Did Fulton have any advantages or aids that Rumsey and the other early experimenters did not have?



STATUE OF ROBERT FULTON IN THE CAPITOL AT WASHINGTON.