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OHIO'S ENGINEERING FIRSTS

By GEORGE S. BONN

2. THE STEAMBOAT

THE *Gordon C. Greene* is the last passenger packet left on the entire Ohio River system and one of but three or four still plying the waters of the Mississippi watershed. But what has Ohio to do with that?

The story of steamboating on the "Western waters" begins and ends in Ohio. The first company organized to build steamboats in the "West" was chartered in Cincinnati in 1801. The first steamboat built in Western waters exclusively for passengers was launched at Cincinnati in 1818. Now, almost a century and a quarter later, we find that the last passenger steamer on the river has Cincinnati for its home port. The Ohio River and the steamboats navigating it during the last century had more to do with opening the West to the pioneers than perhaps any other agency. Towns along the river grew into thriving cities long before other sections of the state were even explored. The growth of the lake cities came later; it is interesting to note that their rise was also because of the steamboat.

In the Beginning

For some reason or other people haven't made up their minds just who was the first man to make a boat go through the water propelled by steam. Here in Ohio it doesn't make much difference. Back in 1801 a company was organized in Cincinnati by Samuel Heighway

and John Pool claiming to own an invention "capable of propelling a boat against stream with considerable velocity, by the power of steam, or elastic vapor."

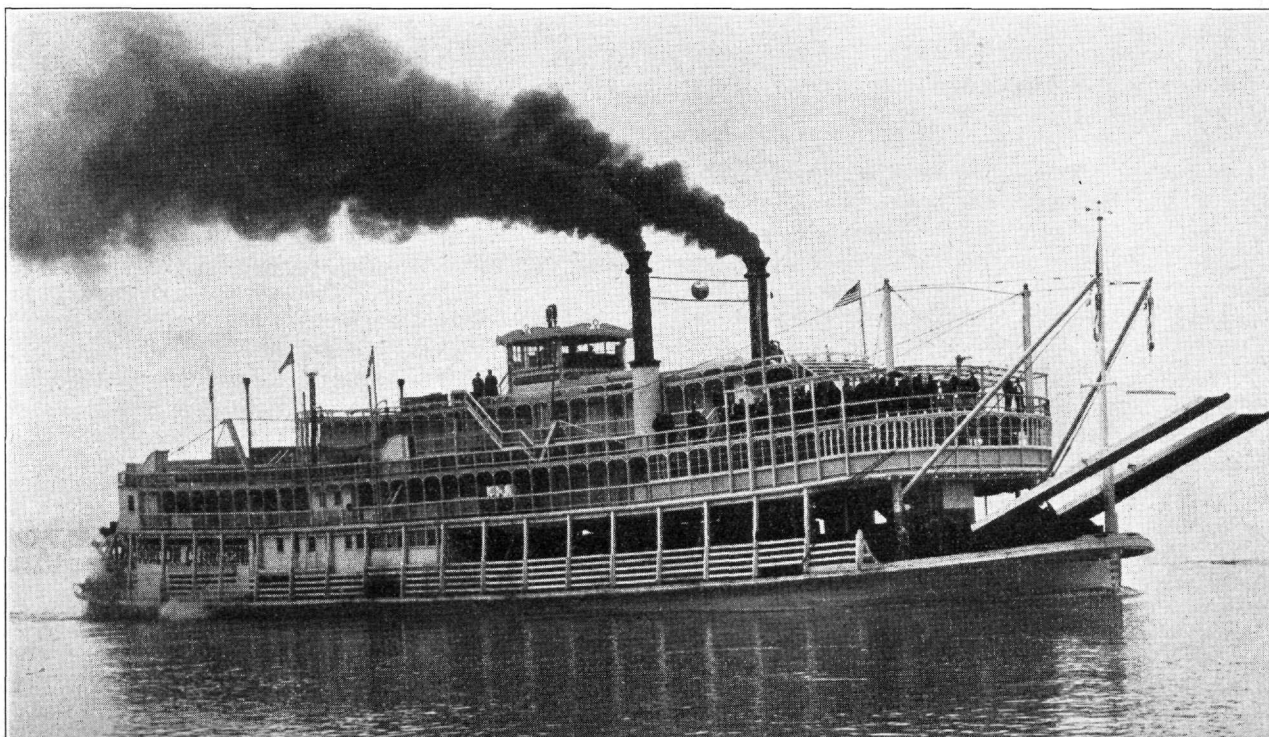
Two years later, April 15, 1803, the Miami Exporting Co. was chartered in Cincinnati "to build up an organization in the trade with New Orleans which would afford the advantage of improved transportation and lower rates."¹ Capital stock in the company was set at \$500,000 with shares at \$100 each. Each of the eleven directors chosen were prominent business men of the city hoping for better trade with the newly opened Louisiana Territory. The company, from the very beginning, cherished the ambitious design of introducing steam navigation. It purchased the unfinished boat of Heighway and Pool hoping to complete it as a steam vessel. However, because of financial difficulties the original idea was abandoned and the boat was fitted out as a broadhorn and sent to New Orleans that way.

For several years the Miami Exporting Co. conducted a shipping business, but as the operations were not specially remunerative a change was made about 1807 to banking. This privilege was permitted by the charter, so this company became the first authorized banking institution in Ohio, as well as the first chartered bank of issue. Unfortunately, it failed on January 10, 1842.

¹Emilius O. Randall and Daniel J. Ryan. *History of Ohio*. Century History Co., N. Y., 1912, vol. 4.

GORDON C. GREENE

Only Remaining Ohio River Passenger Packet



The Ohio Steamboat Navigation Co. had better luck. Robert Fulton's *Clermont* got New Yorkers so steamed up about steamboats that several of them got together and organized a company to build steamboats for use on the Ohio. So, on December 10, 1810, in Pittsburgh, Pa., the Ohio Steamboat Navigation Co. was chartered. Its founders were Daniel D. Tompkins, Robert Livingston, DeWitt Clinton, Nicholas J. Roosevelt, and Robert Fulton, all of New York. The plans for their first boat called for a vessel 116 ft. long with a 20-ft. beam. The engine was to have 34-inch cylinders. The plans were modified somewhat and the finished boat was larger than originally intended. The boat cost about \$38,000. It contained two cabins, one aft for ladies, and a larger one forward for gentlemen. But we are not sure just what the boat was called. Some people believe that the correct name for the vessel was *New Orleans*; others insist that it was just *Orleans*.

Anyhow, it was appropriately launched in Pittsburgh in March, 1811, and had its first trial run on October 15, 1811. On Sunday, October 20, the *Orleans* (or *New Orleans*) left Pittsburgh for New Orleans with Mr. and Mrs. Nicholas J. Roosevelt the only passengers, besides a captain, engineer, pilot, six deck hands, one male and two female servants, a cook, and a Newfoundland dog. This, the first steamboat on the Ohio River, passed Cincinnati on October 27, arrived at Louisville on October 28, and reached New Orleans on January 10, 1812.² The Pittsburgh *Gazette* for Friday, October 25, 1811, tells us that the boat had a 150-ft. keel, was of 450 tons "burthen," and was "built with the best materials and in the most substantial manner."

Incidentally, the boat, running between New Orleans and Natchez, snagged on a submerged stump near Baton Rouge on July 14, 1814, and sank.

The next steamboat to be built for Ohio was the *Comet*, a 145-ton stern-wheeler from Pittsburgh. Then came another Robert Fulton steamer, *Vesuvius*, launched November, 1813. The *Enterprise* came in 1814—from Brownsville, Pa. Then followed *Aetna*, *Despatch*, *Buffalo*, *James Monroe*, and *Washington*, all built on the upper Ohio.

Cincinnati's first steamers were the 203-ton *Vesta* and the 70-ton *Eagle*, both built in 1817-1818. The Queen City's shipbuilding activities developed rapidly

²Ethel C. Leahy. *Who's Who on the Ohio River and Its Tributaries*. Published in Cincinnati, 1931.

with *Hecla*, *Henderson*, *Cincinnati*, and *Experiment* coming out that same season.³ It was in 1818, too, that the first steamboat on Western waters exclusively for passengers was built at Cincinnati. The *General Pike*, as she was called, had a 100-ft. keel, 25-ft. beam, and drew three feet, three inches of water. The cabin was 40x25 ft., the large hall was 40x18 ft., and the 14 staterooms could accommodate 100 passengers. In the seasons 1817-1819, nearly a fourth of the vessels built on the Western waters were launched at Cincinnati; the town's great era of development was in the next 20 years, which were the years when the river navigation was of the utmost importance.

By 1829, 81 steamboats had been built at Cincy. By 1836, 164 had been Cincinnati-made. However, Pittsburgh led with 173; Marietta had built 18; Steubenville, whose first boat had been the *Bezaleel Wells* in 1820, accounted for 12; Portsmouth, 7; Ripley, 6; Gallipolis, Bridgeport, Warren (Jefferson County), and even Zanesville were building boats. Remember, however, that all these were wooden boats. Of the 588 steamers built for Western waters by 1836, Ohio had given 226; Pennsylvania was next with 216; then followed Kentucky with 56, Indiana, Virginia, Tennessee, and "other places."

Traveling by Boat

River travel a hundred years ago was not always fun, as Cyrus P. Bradley described it in his journal. Bradley was a native of New Hampshire and attended Dartmouth College, but had time to take an extended trip through the West which he very carefully noted as he went. One entry in his journal is dated June, 1835:

"1. Mon. Was glad to escape from a dirty town and a dirty bed on board a steamboat. It was the *Free Trader* from Pittsburgh, bound to St. Louis. We left Wheeling at eight o'clock, and they tell us will be at Cincinnati on Wednesday morning. It is very differently constructed from the eastern boats; the accommodations by no means so good. The engine is very different, adapted to the river. The cabin is small, only sixteen berths, gentlemen. They make their trips solely for freight. We have many tons on board, chiefly goods and merchandise which have come from New York by the way of the Erie canal, and are now approaching the Western market. All the passengers they can get in addition to this is clear gain. There were just two berths unengaged, and we of course secured them, and well we did so, for many passengers have since come on board, who will have to sleep on couches upon the floor. The steamer, *Majestic*, we have just heard, exploded its boiler a few days since, down the Mississippi and shockingly wounded ninety persons, many mortally. They were all deck passengers—those in the cabin escaped uninjured. The fare from Wheeling to Cincinnati is eight dollars; the distance is 363 miles."⁴

Boiler explosions were not at all uncommon, if we can believe some of the accounts we read. Henry Howe⁵ tells us, "An explosion was a quick elevating process.

³Charles Theodore Greve. *Centennial History of Cincinnati and Representative Citizens*. Biographical Publishing Co., Chicago, Ill., 1904. Vol. 1.

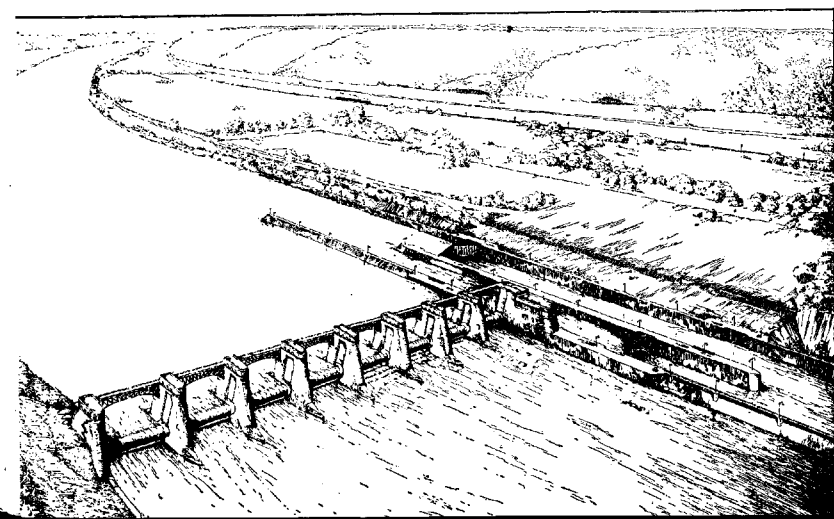
⁴Ohio Arch. and Hist. Society Publications. vol. XV, 1906, p. 214.

⁵Henry Howe. *Historical Collections of Ohio*. 1891. vol. 1, p. 238.

ARTIST'S CONCEPTION OF THE GALLIPOLIS DAM

(Courtesy Eng. Exp. Sta. News)

THE OHIO STATE ENGINEER



The racing 'brag boat,' *Moselle*, which exploded at Cincinnati, April 26, 1838, hurled over two hundred passengers into eternity. For a few moments the air was filled with human bodies and broken timber to fall in a shower into the river and on the shore near by." However, there were ways of preventing these explosions. According to Howe, a Captain Devenny had long held the position of government inspector of steamboats.

"He ascribes explosions as generally if not always occurring from the water getting low in the boiler, and then when fresh water is let in upon the bare metal thus superheated its sudden conversion into steam rends the boiler. This is now guarded against by boring holes in the parts of the boiler that would first become exposed to the heat in case of a diminution of water; which holes are plugged with block tin. At the temperature of 442° the block tin melts the holes open, and the steam escaping gives warning, whereupon the engineer opens the furnace door and the fire goes down. The plugs are externally hollow brass screws, the center tin. They are put in from the inside of the boiler into which the workman crawls for their insertion."

On December 22, 1886, Howe wrote in his journal:

"How cheap traveling is by river. I go, say 100 miles by water, and pay \$2.00 and they feed me as well as move me; a general custom on the Ohio and Mississippi river boats. This is a large comfortable boat, and I'm given ice cream for both dinner and supper, and for drink any amount of Ohio river water, now filled with broken ice, a remarkably soft, palatable beverage."

Later Years

Hundreds of boats have been built and destroyed; fire, snagging on a sunken log, high water, explosions, or simply wearing out, all claimed the old steamers. Steel gradually entered the boat building business and many of these troubles were overcome. But with the beginning of steel boat construction, Ohio lost most of her business, since most of the marine ways in Ohio were fitted for wooden boat building and couldn't handle the steel. Cheap rates on railroads, better roads for automobiles, and the advent of the inter-city bus took much passenger traffic away from the river. Freight lost out, too. Even the building of dams and locks to insure a

9-ft. stage all up and down the river didn't have much effect on the river business. Just after the Ohio had been completely canalized, the "depression" came, and the river was even less used.

This past year, however, there has been great movement along the river, especially in freight. In fact, it is believed that more freight has been carried this past twelve-month than ever before. Marine ways—along the river, but not in Ohio—are busy launching steel boats—tow boats and huge barges. The trend seems to have turned back to river trade. A large roller dam has been built near Gallipolis that will replace three of the older type wicket dams and locks. Other roller dams are to be built. Just last month a floating wharf, said to be the largest on America's inland waterways, was tied in on the Cincinnati dock. This wharfboat is capable of maintaining 6000 tons of freight for its owners, the Greene Line Steamers, Inc.

However, passenger traffic is gone. This little article appeared in the Cincinnati *Enquirer* November 26, 1936:

"Winter passenger traffic on America's major rivers has been discontinued for the first time in more than a century, it was revealed yesterday with the announcement by Captain Chris Greene of the Greene Line Steamers, Inc., that his company's boats had ceased transporting passengers in winter.

"Two of the company's three boats formerly in the passenger trade, the *Tom* and *Chris Greene*, he said, have been converted into freight boats only. The third, the *Gordon C. Greene*, will carry passengers in summer only hereafter.

"This will leave the *Gordon Greene* the only passenger packet on Ohio River, Captain Greene said. It will carry passengers only in June, July, August, and September. He said he knew of only one boat in the Mississippi watershed, the *Golden Eagle*, St. Louis, which carried passengers, only in summer.

"This winter marks the first time in 50 years that the Greene Line itself has not carried passengers."

It is appropriate therefore, that we should tell about these old river packets, the part Ohio played in the building of the boats, the part the boats had in building Ohio, and especially about the *Gordon C. Greene*, the last of the Ohio River passenger packets.