Late in 1886, the Northwestern Transportation Company placed an order with the Detroit Dry Dock Company for the first of two composite-hulled bulk carriers that the shipyard was to build for this fleet. Hull 78 of the shipyard was built with a steel hull above the loaded waterline, while below that she was wood-planked over steel frames. This was a transitional type of construction which enjoyed some favour for a few years when wooden hulls were giving way to steel construction, the thought being that the composite hull embodied the best of both styles.

Hull 78 was christened FAYETTE BROWN when she was launched at Wyandotte, Michigan at 10:00 a.m. on Saturday, May 14, 1887, and she was enrolled at Detroit under U.S. official number 120682. She was 252.6 feet in length between perpendiculars (266.0 feet overall), 40.3 feet in the beam and 18.6 feet in depth (21.5 feet moulded), with tonnage of 1740.55 Gross and 1515.76 Net.

As usual with ships built by the Detroit Dry Dock Company, the machinery for FAYETTE BROWN was built for her by the yard's Dry Dock Engine Works, and the BROWN's triple expansion engine bore the yard's Number 137, while the boilers were Numbers 49 and 50. The engine had cylinders of 19, 30 and 52 inches diameter and a stroke of 40 inches, which developed 700 Indicated Horsepower at 80 revolutions per minute. The two single-ended, coal-fired, Scotch boilers (called "cylindrical" by the builder), measured 11'0" in both diameter and length, and were manufactured of one-inch steel plate. There were a total of four furnaces, with 80 square feet of grate surface and 2,338 square feet of heating surface. Steam was delivered at a working pressure of 150 pounds per square inch.

FAYETTE BROWN (II) was a handsome steamer, but not only her composite hull showed the origins of her design in the big wooden steamers of just a few years before. She also was flush-decked, with neither raised forecastle nor poop, and her hull had much sheer. Her stem was straight, while her counter stern was deep and heavy, rather than finely cut. She had several rubrails running along her sides to protect her planking and plating, the most prominent of which was at the loaded waterline where the wooden lower sides gave way to the steel upper hull. It was usual for nine wooden fenders to be suspended down each side from ropes and chains attached to the spar deck rail, to afford additional protection from impact with wharves and lock walls. The stocked anchor was carried on the foredeck and was worked by a large davit mounted just abaft the steering pole, the anchor chain on either side feeding from a hawsehole set just above the waterline, quite close to the stem.

The deck crew was housed in a large deckhouse located on the spar deck forward, sheltered by a closed steel rail which, in fact, ran all the way down both sides of the deck and around the fantail, with a small upper extension at the bow. The cabin was both broad and deep, with a big sweeping curve in its front and an overhang that was supported by prominent stanchions and served as bridge wings at the side.

Atop this deckhouse, and surrounded by an open pipe rail, was the large pilothouse, roughly square in shape, with three big, four-sectioned windows in its front and two windows and a door in each side. The pilothouse was raised half a deck level above the foredeck and was accessed by a short set of steps on each side. These steps then continued upward to the roof of the small texas cabin (which was placed abaft the pilothouse and contained the master's quarters and office), from which another set of steps led up the aft side of the wheelhouse to the monkey's island. Both the texas roof and the monkey's island had open pipe rails, but a canvas weathercloth could be raised in bad weather to give a modicum of shelter from the elements. The only piece of navigational equipment on the open bridge was a waist-high box which held a compass and the upper end of the "cussing box", the speaking tube through which the officer on watch would holler helm and