

Bessemer Channel Steamer, now building by Charles Shipbuilding and Engineering Co limited, to be fitted with Mr Bessemer's Patent Swinging Saloon.

Drawings and Specifications submitted by the Builders, with a view to the Vessel receiving the A.1. character.

Dimensions as follows:—

Extreme length at load water line 350.0 ft. ins

Breadth (inside Paddle wheels) 40.0

Draught of water (forward & aft) 7.6

Total depth amidships to top of floors 17.4

This vessel is of peculiar construction and is intended for a very high speed with light draught of water. She is framed both transversely and longitudinally in the bottom, the transverse frames being 24 inches apart, and there being three continuous longitudinal girders on each side of the middle line extending the whole length of the ship. The transverse frames consist of angle iron $3\frac{1}{2} \times 3\frac{1}{2} \times \frac{7}{16}$ extending across the keel to the height of the upper deck stringer plate, with reverse bars $5 \times 3 \times \frac{3}{8}$ extending to the height of the lower deck on the frames which have no beams, and to the height of the upper deck stringer plate on those frames which have beams attached to them. At every third frame deep floor plates are fitted $25 \times \frac{7}{16}$ between the longitudinals with a single angle iron $3 \times 3 \times \frac{6}{16}$ on the upper edge and a continuous transverse flat plate $6 \times \frac{6}{16}$ riveted upon it and passing above the angle irons of the longitudinal girders. She has a vertical through

Plate Keel $25" \times \frac{8}{16}$ with a flat Keel plate $\frac{10}{16}"$ thick doubled with $\frac{9}{16}"$ plates. The longitudinal girders are $\frac{7}{16}"$ thick and of the same depth as the floor plates in way of them; and they have on their upper edge double continuous angle irons $3 \times 3 \times \frac{7}{16}$. They score over the transverse frames and reverse frames and are attached to the outside plating by angle irons $3\frac{1}{2} \times 3 \times \frac{7}{16}$.

The midship part of the vessel for a length of 86 feet is occupied by the swinging cabin, and for a length of 40 feet in this space no beams can be placed across the vessel, but the sides of the vessel are built on the cellular system, ^{as shown on section with eight} ~~with~~ partial bulkheads and an inner longitudinal bulkhead attached thereto on each side stiffened by vertical angle irons between the partial Bulkheads, and ~~forming a satisfactory self supporting structure~~. Before and abaft the swinging saloon space are Engine and Boiler Rooms, there being two sets of Engines and Boilers with a pair of paddle wheels to each. Under the Engines the deep floor plates are fitted to every frame, and there are additional bearers under both the Engines and Boilers as shown on the longitudinal plans.

At the ends of the vessel, beyond the Engine and Boiler spaces, the height of the deck above the water is reduced to about 4 feet from a midship height of $12\frac{1}{2}$ ft. and the upper deck stringer plates and the doubling of the sheerstrake are sloped downwards at these parts to afford continuous longitudinal strength as shown on the drawings submitted.

The outside plating of bottom from the Keel to the upper turn of bilge is $\frac{9}{16}"$ amidships tapered to $\frac{8}{16}"$ at the ends. Above the bilge the plating is $\frac{8}{16}"$ amidships tapered to $\frac{7}{16}"$ at the ends. The sheerstrake is $\frac{8}{16}"$ thick doubled with $\frac{8}{16}"$ plates for a length of 248 ft amidships. At the bilge it is proposed to fit a bilge keel of great depth on each side extending 6 feet out from the outside plating in order to reduce the rolling motion of the vessel to a minimum.

Drawings were requested to be forwarded showing the proposed method of strengthening the vessel in way of the points of suspension of the swinging saloon; these have now been received, and appear to be satisfactory as far as can be seen without a personal inspection of the vessel.

It is respectfully submitted that as this vessel is now considerably advanced in construction, and possesses many features of an entirely novel character, she should be specially surveyed before her claims for the A Character can be fully determined, and it is considered that provided on survey the workmanship and materials, together with the special arrangements for affording local strength at essential parts of the structure be found to be satisfactory, the vessel appears to be worthy of the favorable consideration of the Committee as a vessel fitted to perform efficiently the duties for which she is intended to be classed in the Register Book A for

Channel purposes only, and to be
marked Exp to denote the novel
character of her design and construction, as
adopted by the Committee in the "Dacey
Channel Steamer" and other vessels of
Novel Construction

18/3/74

18th
J.H.
H.G.

Resumes Salom
Steamer



© 2021

Lloyd's Register
Foundation