

IRON SHIPS.

Rev 9/8/69 228

No. 3940 Survey held at Grimsby Date 13th August 1869

on the Screw Steamer "Caroline" Master Wade

Tonnage under tonnage deck 180.74 Built at Grimsby When built 1869 Launched 24th June

Ditto of deck house 3.10.24 By whom built Thomas Charlton Owners Lethbridge

Ditto of engine room 66.95 Port Register tonnage 182.37 Port belonging to London Destined Voyage Honfleur

Gross Tonnage 209.22 Special Survey during building & afloat in Dock

Surveys while Building, Afloat, or in Dry Dock Special Survey during building & afloat in Dock

| Length aloft | Feet. Inches. | Extreme Breadth | Feet. Inches. | Depth from top of Upper Deck Beam to top of Floor | Feet. Inches. | Power of Engines | Horse. | No. of Decks |
|--------------|---------------|-----------------|---------------|---|---------------|------------------|--------|--------------|
| 135 | 6 | 20 | 2 | 9 | 9 | 35 | | one |

(Dimensions of Ship per Register, length 135.4 breadth 20.3 depth 9.8)

| | Inches in Ship | | Inches required per Rule for 100 tons Scale | | Plates in Garboard Strakes, breadth and thickness | Inches. In Ship. | 16ths. In Ship. | Inches. required per Rule. | 16ths. required per Rule. |
|--|------------------|-----------------|---|---------------------------|---|------------------|-----------------|----------------------------|---------------------------|
| | Inches. In Ship. | 16ths. In Ship. | Inches. required per Rule. | 16ths. required per Rule. | | | | | |
| if bar iron, depth and thickness | 6 | 1/2 | 6 | 1/2 | 30 | 7/16 | 24 | 7/16 | |
| if plate iron, breadth and thickness | 6 | 1/2 | 6 | 1/2 | Ditto from Garboard to upper part of Bilges | 5/8 | | 9/16 | |
| if bar iron, moulding and thickness | 6 | 1/2 | 6 | 1/2 | from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold | 5/8 | | 5/16 | |
| if plate iron, breadth and thickness | 7/4 | 2 5/8 | 6 | 3 | from 3/4ths depth of Hold to lower edge of Sheerstrake | 5/8 | | 5/16 | |
| if bar iron, moulding and thickness | 21 | | 21 | | Sheerstrake, breadth and thickness | 3 3/4 | 4/16 | 24 | 4/16 |
| if plate iron, breadth and thickness | 21 | | 21 | | Butt Straps to outside plating, breadth and thickness | 8 | 7/16 | 5/8 | 5/16 |
| of Frames from moulding edge to lining edge, all fore and aft | 2 1/2 | 2 1/2 | 4/16 | 2 1/2 | 4/16 | 2 1/2 | 4/16 | 4/16 | |
| Size of Angle Iron, single or double | 2 1/4 | 2 1/4 | 5/16 | 2 1/4 | 5/16 | 2 1/4 | 5/16 | 5/16 | |
| Reversed Iron, to every frame or every frame | 2 1/4 | 2 1/4 | 5/16 | 2 1/4 | 5/16 | 2 1/4 | 5/16 | 5/16 | |
| Depth and thickness of Floor Plate at mid line | 12 | 5/8 | 12 | 5/8 | 5/8 | 12 | 5/8 | 5/8 | |
| Ditto ditto at Bilge Keelson | 6 1/2 | 5/8 | 6 1/2 | 5/8 | 5/8 | 6 1/2 | 5/8 | 5/8 | |
| Size of Reversed Angle Iron, and No. one at top of Floor Plate | 2 1/4 | 2 1/4 | 5/16 | 2 1/4 | 5/16 | 2 1/4 | 5/16 | 5/16 | |
| Deck (N ^o . 39) double Angle Iron, Plate, Tee, or Bulb Iron | 5 | 3 | 7/16 | 5 | 7/16 | 5 | 7/16 | 7/16 | |
| double or single Angle Iron, on edge | 5 | 3 | 7/16 | 5 | 7/16 | 5 | 7/16 | 7/16 | |
| average space between | 42 | | 42 | | | 42 | | | |
| Upper or Lower Deck (N ^o .) | | | | | | | | | |
| double Angle, Tee, Plate, or Bulb Iron | | | | | | | | | |
| double or single Angle Iron on edge | | | | | | | | | |
| average space between | | | | | | | | | |
| Plate, sided and moulded, thickness of Plate size of Angle Iron | | | | | | | | | |
| Engine | | | | | | | | | |
| on, single or double plate, box, or intercostal | 9 | 7/16 | 8 | 7/16 | | | | | |
| Size of Plates | 10 | 5/8 | | | | | | | |
| Size of Angle Irons | 3 | 3 | 7/16 | 3 | 3 | 7/16 | | | |
| Side, single or double, plate, box, or intercostal | | | | | | | | | |
| Bilge (No. one at each Bilge) single, or double, plate, or box | 3 1/2 | 3 | 7/16 | 3 | 3 | 7/16 | | | |
| material, iron frames or, if none, in what manner compensated for. | 3 1/2 | 3 | 7/16 | 3 | 3 | 7/16 | | | |
| heads, and Hawse Timbers | | | | | | | | | |

Plates, Garboard, double or rivetted to keel, double or rivetted at upper edge, with rivets (5/8 in.) diameter, averaging (3 3/4 in.) apart.

Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 3/4 in.) apart.

Butts from Keel to turn of bilge, worked carvel with butt straps (5/16) thick, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 3/4 in.) apart.

Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 3/4 in.) apart.

Edges of Sheerstrake, double or single rivetted? At upper edge rivetted to upper end At lower edge double rivetted

Butts from bilge to planksheers, worked carvel with butt straps (5/16 x 7/16) thick, double or single rivetted; with rivets (5/8 in.) diameter, averaging (2 3/4 in.) apart. Breadth of laps in double rivetting (4) Breadth of laps in single rivetting (2)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double rivetted

Planksheer, how secured to the plating of the sides Explain by sketch

Waterway " " planksheer and to the Beams if necessary. Explain by sketch

Deck Beams, how secured to the side? Rivetted to keel

Hold or Lower Deck ditto

Paddle " " No. of breasthooks 400 crutches two

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?

Manufacturer's name or trade mark Stockton Malleable and Hartlepool

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Thomas Charlton Surveyor's Signature M. Davidson

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? Yes

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes

Do the fillings between the ribs and plates fill in solid with single pieces Yes or are they in short lengths of various thicknesses? No

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes

Are there any rivets which either break into or have been put through the seams or butts of the plating? A few in Dead Rivetting at Butts

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. (If they are of Iron or Steel give the Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of rivetting, quality of Materials, and if stamped with Maker's name.)

Certificates from Lloyds Rotherhithe Proving House & signed W. H. Reade Superintendent

| No. | SAILS | CABLES, &c., tested at <u>Lloyds Rotherhithe Proving House</u> | | | | ANCHORS, tested at <u>Lloyds Rotherhithe Proving House</u> | | | | | |
|-----|--------------------------|--|--------------------------|-----------------------------|-----------------------|--|--------|---------------------------|-----------------------------|------------------------|---------------|
| | | Chain | No. on Chain seen by me. | No. and date on Certificate | Fathoms. Inches. | Tons. | No. | No. on Anchor seen by me. | No. and date on Certificate | Weight Ex. Stock Tons. | |
| | Fore Sails, | Chain <u>Steel</u> | | <u>3.5.69</u> | <u>186</u> <u>7/8</u> | <u>13 3/4</u> | Bowers | <u>2</u> | <u>4099</u> | <u>4.8.69</u> | <u>5.2.7</u> |
| | Fore Top Sails, | Hempen | | | <u>30</u> <u>8/6</u> | | Stream | <u>1</u> | <u>3942</u> | <u>4.8.69</u> | <u>5.6.63</u> |
| | Fore Topmast Stay Sails, | Stream Cable | | | <u>90</u> <u>3/2</u> | | Kedges | <u>1</u> | | | |
| | Main Sails, | Hawser | | | <u>90</u> <u>5/2</u> | | | | | | |
| | Main Top Sails, | Towlines | | | <u>90</u> <u>5</u> | | | | | | |
| | and | Warp | | | <u>90</u> <u>3/2</u> | | | | | | |
| | | All of <u>good</u> quality. | | | | | | | | | |

Her Standing and Running Rigging Line & Stump sufficient in size and good in quality.

She has One side Song Boat and another

The present state of the Windlass is good Capstan lunch and Rudder good Pumps good

Order for Special Survey No. 104 Date 25th Dec 1868 DATES of Surveys held while building as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the progress of rivetting
- 3rd. When the beams were in and fastened, and before the decks were laid
- 4th. When the ship was complete, and before the plating was finally coated
- 5th. After the ship was launched

Special Survey 13th Dec 1868

State if she has a Spar Deck no Poop yes or Forecastle no

General Remarks, Is finished with rounded Poop all frames extending to the height of main rail the alternate frames continued and forming Beams plating 7/8 3/6 single rivetted at edges & double rivetted at the Butts -

Month inspected Dec 21st Note annexed As a similar vessel to the Liverpool report No. 3807 - the beam and iron on the frames on carried well up the ship and owing to the vessel's depth being only 9 ft 9" hold struts have not been fitted

In what manner are the surfaces preserved from oxidation? Inside The bottom inside with Cement the remainder with Red Ditto ditto Outside with Paint

I am of opinion this Vessel should be Classed B1

The amount of the Fee £ 2 - - is received by me, Mr Davidson
 Special £ 9 19 -
 Certificate (if required) £ - - -

Committee's Minute 24th August 1869

30th September 1869
10th "

Character assigned B1

