

IRON SHIP.

No. 3416 Survey held at Penfrew Date, 18th June/72 Last Survey 3rd Oct^r 1873

On the S. S. "Vasco de Gama" Yard Number 133 Master Pice

TONNAGE under Deck 2096.58

Ditto of Third, Spar, or Awning Deck. 467.78

Ditto of Poop, or Raised Or. Dk. 48.07

Ditto of Houses on Deck 48.07

Ditto of Forecastle 48.07

Gross Tonnage 2912.43

Less Crew Space 2864.36

Less Fuel Room 931.98

Registered Tonnage as out on Regd. 1980.45

ONE, OR TWO DECKED THREE DECKED VESSEL.

HALF BREADTH (moulded) 18.37

DEPTH from upper part of Keel to top of Upper Deck Beams 25.90

GIRTH of Half Midship Frame (as per Rule) 38.58

1st NUMBER 82.85

1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 75.85

LENGTH 348

2nd NUMBER 26.395

PROPORTIONS—Breadths to Length 9.47

Depths to Length—Upper Deck to Keel 18.81

Main Deck ditto 13.43

Built at Penfrew

When built 1873 Launched May 1873

By whom built Henderson, Coulborn & Co.

China Transpacific S. S. Co. Limited

Port belonging to London

Destined Voyage London to China

If Surveyed while Building Afloat, or in Dry Dock.

LENGTH on deck as per Rule 348 BREADTH Moulded 36 DEPTH top of Floors to Upper Deck Beams 24 1/2 Power of Engines 530 No. of Decks with flat laid Three No. of Tiers of Beams Four

Dimensions of Ship per Register, length, 348.4 breadth, 37.0 depth, 24.4

KEEL, depth and thickness 10 x 2 3/4 Inches in Ship. Inches per Rule. 10 x 2 3/4

STEM, moulding and thickness 10 x 2 3/4 Inches in Ship. Inches per Rule. 10 x 2 3/4

STERN-POST for Rudder do. do. 10 x 5 1/2 Inches in Ship. Inches per Rule. 10 x 5 1/2

Distance of Frames from moulding edge to moulding edge, all fore and aft 24 (Class 100 A)

FRAMES, Angle Iron, for 1/2 length amidships 4 1/2 Inches in Ship. Inches per Rule. 4 1/2

Do. for 1/4 at each end 4 1/2 Inches in Ship. Inches per Rule. 4 1/2

REVERSED FRAMES, Angle Iron 3 Inches in Ship. Inches per Rule. 3

FLOORS, depth and thickness of Floor Plate 2 1/2 Inches in Ship. Inches per Rule. 2 1/2

at mid line for half length amidships 2 1/2 Inches in Ship. Inches per Rule. 2 1/2

thickness at the ends of vessel 2 1/2 Inches in Ship. Inches per Rule. 2 1/2

depth at 1/2 the half-bdth. as per Rule 10 1/2 Inches in Ship. Inches per Rule. 10 1/2

height extended at the Bilges Twice depth

BEAMS, Upper, Spar, or Awning Deck 7 Inches in Ship. Inches per Rule. 7

Single or double Angle Iron, Plate or Tee Bulb Iron 7 Inches in Ship. Inches per Rule. 7

Average space 48

BEAMS, Main or Middle Deck 9 Inches in Ship. Inches per Rule. 9

Single or double Angle Iron, Plate or Tee Bulb Iron 9 Inches in Ship. Inches per Rule. 9

Average space 48

BEAMS, Lower Deck, Hold or Orlop 7 Inches in Ship. Inches per Rule. 7

Single or double Angle Iron, Plate or Tee Bulb Iron 7 Inches in Ship. Inches per Rule. 7

Average space every 2nd frame

KEELSONS Centre line, single or double plate, 19 Inches in Ship. Inches per Rule. 19

box, or Intercoastal, Plates 9 Inches in Ship. Inches per Rule. 9

Rider Plate 6 Inches in Ship. Inches per Rule. 6

Bulb Plate to Intercoastal Keelson 6 Inches in Ship. Inches per Rule. 6

Angle Irons 6 Inches in Ship. Inches per Rule. 6

Double Angle Iron Side Keelson 6 Inches in Ship. Inches per Rule. 6

Side Intercoastal Plate 6 Inches in Ship. Inches per Rule. 6

do. Angle Irons 6 Inches in Ship. Inches per Rule. 6

Attached to outside plating with angle iron 3 1/2 Inches in Ship. Inches per Rule. 3 1/2

BILGE Angle Irons 6 Inches in Ship. Inches per Rule. 6

do. Bulb Iron 10 Inches in Ship. Inches per Rule. 10

do. Intercoastal plates riveted to plating for half length 9 1/6 Inches in Ship. Inches per Rule. 9 1/6

BILGE STRINGER Angle Irons 6 Inches in Ship. Inches per Rule. 6

Intercoastal plates riveted to plating for 3/5 length 9 1/6 Inches in Ship. Inches per Rule. 9 1/6

SIDE STRINGER Angle Irons 6 Inches in Ship. Inches per Rule. 6

Transoms, material. Knight-heads. Hawse Timbers. Iron

Windlass Patent Iron Pall Bitt Iron

The FRAMES extend in one length from Keel to Awning deck string

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main deck stringer and to Upper deck alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 7/8 ins. from centre to centre.

Butts of three Strakes at Bilge for Keel length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 7/8 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.

Butts of Main Stringer Plate, treble riveted for all length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

Breadth of laps of plating in double riveting 6 times dia. Breadth of laps of plating in single riveting 3 1/2 times dia.

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble & Double

Waterway, how secured to Beams by rivets & Nut & Span bolts (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? by knees riveted to frame & stringer plate

No. of Breasthooks, 6 Crutches, 6

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

Manufacturer's name or trade mark, Glasgow, Blackburn & Napend.

The above is a correct description.

Builder's Signature, Henderson, Coulborn & Co. Surveyor's Signature, T. Moverly

Official Number 133

1873

IRON 455-0166

Workmanship. Are the butts of plating planed or otherwise fitted?

Planed

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

Are the fillings between the ribs and plates solid single pieces?

Yes

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Yes

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Yes

Do any rivets break into or through the seams or butts of the plating?

a few in butts

11874 Iron

Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit Masts of Iron. Mizen of Oregon

Date of Contract 6th May 1872.

Tested at Retherton Dec^r 9th 1872 by M. K. Freade.

Tested at Retherton Dec^r 19th 1872 by M. K. Freade.

NUMBER for EQUIPMENT 32637

Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.
150	2	72 ton	2"	72
150	2	72		
90	13/16	25 1/2	13/16	
90	12		12	
180	8		8	
180	6			
90	5 1/2	9044. 9043.		

ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
Bowers	6482	30.0.0	35.2.2.0	3 8	34 10/20
(Machine where Tested, date, and name of Superintendent.)	6484	38.3.0	34.19.1.14		
	6482	32.2.2.2	30.12.3.7	32.1.6	30 7/2
Stream	39	14.2.0	13.9.2.0	14 1/2	
Kedges	1	7.1.2	7.10.1.0	7 1/4	
	1	3.1.16	5.9.0.0	3 1/2	

One full
Sail
with
Spare
and

SAILS.	CABLES, &c.
Fore Sails,	Chain ...
Fore Top Sails,	(Machine where Tested, date, and name of Superintendent.)
Fore Topmast Stay Sails	Hempen Stream
Main Sails,	Chain Cable
Main Top Sails,	Hawser ...
	Towlines ...
	Warp ...
	quality good

Standing and Running Rigging Wire & hemp sufficient in size and good in quality. She has four Life Boats and four others. The Windlass is Good Capstan Good and Rudder Good Pumps Good and Efficient.

Engine Room Skylights.—How constructed? Iron. Leak. Skylight cover. How secured in ordinary weather? Bolts and bars

What arrangements for deadlights in bad weather? Brass guards and Deadlights

Coal Bunker Openings.—How constructed? of Iron How are lids secured? by buttons Height above deck? Flush

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Flush Awning deck. Ports & Scuppers not cut between Upper & Awning deck as per letter of 9th May 1873.

Cargo Hatchways.—How formed? of Iron

State size Main Hatch 11-0 x 11 1/2 feet Forehatch 7-6 x 8-0 Quarterhatch

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams?

Hatches, If strong and efficient? Yes.

Order for Special Survey No. 861

Date 2nd July 1872

Order for Ordinary Survey No.

Date

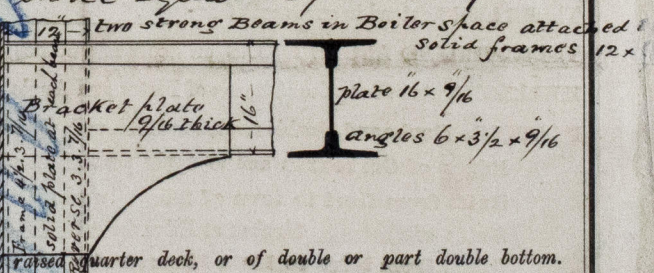
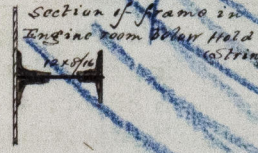
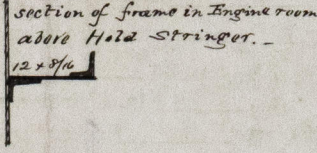
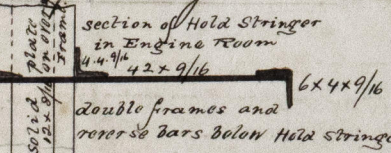
No. 133 in builder's yard.

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 process of riveting
- 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 or cemented
- 5th. After the ship was launched and equipped

Built under Special Survey from 18th June 1872 to 3rd Oct^r 1873. Visited on the dates given below.

General Remarks, This vessel has been built in conformity with the appended approved Midship Section, in accordance with your letter of Instruction 6th June 1872, with a view to Class 100 A Three deck (with Awning deck) every frame is carried up to the Awning deck stringer plate, the upper deck Sheerstrake is 13/16" thick, hook it and the Main deck Sheerstrakes are treble riveted in the Butts for 1/2 length Amidships, the thickness of the plating between the Upper, and Awning deck is 8/16" and 7/16" as shown on Section on account of this construction above the Main deck, and the proposition of the Builders to limit the load draft to 22 feet Amidships the Committee were pleased to sanction in their letter of 9th May 1873 that the ports & Scuppers required by Rule need not be cut in this case. Every frame in the Engine space is formed with a solid plate 12 x 8/16" as shown in red on Mid Section, the Boiler space is 38 feet in length divided into three equal spaces by two very strong Beams as shown in Section below.



State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement and paint Outside Red lead & paint

I am of opinion this Vessel should be Classed 100 A. 1 Three deck, with Awning deck over.

The amount of the Entry Fee ... £ 5 : : : is received by me,

Special ... £ 12 : : : Certificate ... £ 12 : : : is received by me,

(Travelling Expenses) (if any) £ 6 : 6/2

Committee's Minute 7th Oct^r 1873

Character assigned 100 A. 1

Loadline 22 feet.

June 18th 72. July 11th 25th Augst 2nd 13th 21st 29th Sep^r 4th 10th 25th Oct^r 18th 1873. Nov^r 7th 13th 15th 20th 27th Dec^r 4th 6th 12th 18th 25th Jan^y 1st 7th 8th 15th 23rd 31st Feb^r 5th 10th 19th 27th March 5th 10th 18th 25th April 3rd 4th 9th 16th 24th 30th May 5th 9th 13th 19th 26th June 3rd 11th 16th 19th 25th July 1st 7th 15th 17th 29th Augst 1st 7th 14th 19th 28th Sep^r 3rd 8th 11th 18th 26th Oct^r 3rd 10th 17th 24th 31st Nov^r 7th 14th 21st 28th Dec^r 5th 12th 19th 26th 31st