

IRON SHIP.

No. 3582 Survey held at Glasgow Date, First Survey 6 April Last Survey 20 Nov 18 72
On the S. S. Harlingen Yard Number 60 Master H. K. White

TONNAGE under 210.95 ONE, OR TWO-DECKED, THREE-DECKED VESSEL.
Tonnage Deck }
Ditto of Third, Spar, }
or Awning Deck. }
Ditto of Deck, or Awning Deck. }
Raised Qr. Dk. }
Ditto of Houses }
on Deck }
Ditto of Forecastle }
Gross Tonnage 231.08
Less Crew Space 10.53
220.55
Less Engine Room 73.95
Register Tonnage 146.60
as cut on Beam }
HALF BREADTH (moulded)... 10.43
DEPTH from upper part of Keel to top of Upper Deck Beams 12.20
GIRTH of Half Midship Frame (as per Rule) 20.16
1st NUMBER 42.79
1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 139
LENGTH 139
2nd NUMBER 5947
PROPORTIONS—Breadths to Length 6 times
Depths to Length—Upper Deck to Keel 11.3 times
Main Deck ditto

Built at Glasgow
When built 1872 Launched 10 Aug 1872
By whom built Dobie & Co.
Owners Leith & Harlingen
Steam Ship Company
Port belonging to Leith
Destined Voyage Clyde to Hamburg
and
Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as 139 - Breadth Moulded 20 8 DEPTH top of Floors to Upper Deck Beams 11 5
per Rule ... 139 - Do. do. Main Deck Beams ... 11 5
Dimensions of Ship per Register, length, 140.6 breadth, 20.9 depth, 10.85
Power of Engines ... 40 Horse. No. of Decks with flat laid One
No. of Tiers of Beams

KEEL, depth and thickness 7 x 15/8
STEM, moulding and thickness 16 1/4 x 5/8
STERN-POST for Rudder do. do. 6 1/4 x 3/4
Distance of Frames from moulding edge to moulding edge, all fore and aft 21
(Class 905A)

FRAMES, Angle Iron, for 3/4 length amidships Do. for 1/2 at each end 3 2 1/2 5
REVERSED FRAMES, Angle Iron 2 1/4 2 1/4 4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 12 x 5 1/2 6
thickness at the ends of vessel 4
depth at 3/4 the half-bdth. as per Rule 5
height extended at the Bilges 5 twice

BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 5 3 7
Single or double Angle Iron on Upper edge 42
Average space 42

BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron
Single, or double Angle Iron, on Upper Edge
Average space

BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron
Single or double Angle Iron on Upper Edge
Average space

KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates 8 x 8
Rider Plate 6 1/2 x 6
Bulb Plate to Intercoastal Keelson 5 1/2 4 10
Angle Irons 3 3 6
Double Angle Iron Side Keelson
Side Intercoastal Plate
do. Angle Irons
Attached to outside plating with angle iron

BILGE Angle Irons 4 4 10
do. Bulb Iron 1/2 length 5 x 5
do. Intercoastal plates riveted to plating for length

BILGE STRINGER Angle Irons 3 3 6
Intercoastal plates riveted to plating for length

SIDE STRINGER Angle Irons

Transoms, material. Knight-heads. Hawse Timbers. Iron
Windlass Harfield's Patent Pall Bitt

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 5/8 in. Rivets, about 5 apart.
The REVERSED ANGLE IRONS on floors and frames extend from middle line to above side 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 7/8 in. diameter, averaging 4 3/8 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 5/8 in. diameter, averaging 2 3/4 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 3/4 ins. from centre to centre.
Butts of Strakes at Bilge for length, treble riveted with Butt Straps thicker than the plates they connect.
Edges from bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 5/8 in. diameter, averaging 2 3/4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 5/8 in. diameter, averaging 2 3/4 ins. from cr. to cr.
Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted, at lower edges, upper edges single.
Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
Breadth of laps of plating in double riveting 6 times Breadth of laps of plating in single riveting 3 1/2 times

Butt Straps of Keelsons, Stringer and Tie Plates, double or single Riveted?
Waterway, how secured to Beams Gutter Waterway (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? By knees No. of Breasthooks, Three Crutches, Three
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? B. Boiler
Manufacturer's name or trade mark, Govan

The above is a correct description.

Builder's Signature, Dobie & Co. Surveyor's Signature, Saml. Lanthorn

PLATES in Garboard Strakes, breadth and thickness 42 1/2 7 30 7
ness from Garboard to upper part of Bilges 7 6
of doubling at Bilge, or increased thickness, and length applied on strake 7 one strake
fm up. part of Bilge to lr. edge of Sh'rstrake 7 5
Main Sheerstrake, breadth and thickness 40 9 30 9
of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.
Up. or Spar Dk Sh'rstrake, brdth & thickness
Butt Straps to outside plating, breadth & thickness 8 1/2 9 3/4 5 9 8-9 3/4 5-9
Lengths of Plating 10 7 16 8 9
Shifts of Plating, and Stringers 2 spaces 2 spaces
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 26 6 28 6
Angle Iron on ditto 3 x 3 x 6 3 x 3 x 6
Tie Plates fore and aft, outside Hatchways 10 9 8 6 6 6
Diagonal Tie Plates on Beams No. of Pairs, none 16 none
Planksheer material and scantling
Waterways do. do. Gutter Waterway
Flat of Upper Deck do. do. Pine 3
How fastened to Beams nuts & screws
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Tie Plates, outside Hatchways
Diagonal Tie Plates on Beams, No. of pairs
Waterways materials and scantlings
Flat of Middle Deck do. do.
How fastened to Beams
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Stringer or Tie Plates, outside Hatchways
Flat of Lower Deck
Ceiling between Decks, thickness and material in hold to Bilge, R. Elm & Pine 2
Main piece of Rudder, diameter at head 33 1/4 2 3 3/4
do. at heel 2 1/4 2 1/4
Can the Rudder be unshipped afloat? Yes
Bulkheads No. 4 Thickness of 4 1/6
Height up to deck By double frames
How secured to sides of ship By double frames
Size of Vertical Angle Irons 3/4 x 2 1/4 x 1/6 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? Yes

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

Masts, ~~Bowsprit~~, ~~Yards~~, &c., are Pitch Pine 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 Fore and aft Schooner Rigger

Tested at Glasgow by Wm Taylor
23rd and 27th Sept 1872

10782. Iron
Tested at Glasgow by Wm Taylor
23rd Sept 1872

NUMBER for EQUIPMENT <u>6541</u>			Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.						Bowers	1	6.3.12	9.2.2.0	6 1/2	8 1/2
One	Fore Sails,	Chain ...	180	15/16	15.17.2	15/16	15 16/20	(Machine where Tested, date, and name of Superintendent.)	1	6.2.21	8.18.3.0		
Suit	Fore Top Sails,	Hempen Stream	40	9/16				Stream ...					
	Fore Topmast Stay Sails	Iron Cable	90	7		7							
	Main Sails,	Hawser ...	90	7									
	Main Top Sails,	Towlines	90	7									
and		Warp ...						Kedges	1	2.0.7		2 1/2	
		quality <u>good</u>								1.0.26		1 1/4	

Standing and Running Rigging Wire & Hemp sufficient in size and good in quality. She has Two ~~Long~~ Boat sway

The Windlass is Good Capstan — and Rudder Good Pumps Good and efficient

Engine Room Skylights. How constructed? Plate & Angle Iron & Oak How secured in ordinary weather? Iron Bars

What arrangements for deadlights in bad weather? Thick Glass and Iron Bars

Coal Bunker Openings. How constructed? Iron Castings How are lids secured? Slots Height above deck? Flush

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Pipes and Ports

Cargo Hatchways. How formed? Plate and Angle Irons

State size Main Hatch 10" 6" x 7" 0" Forehatch 5.6 x 4.6 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. 864 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built under

Date 3rd July 1872 Surveys held 2nd. On the plating during the progress of riveting Special Survey between

Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid 6th April & 20th Nov 1872

Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented —

No. 60 in builder's yard. Section 18. 5th. After the ship was launched and equipped —

General Remarks,

Has been built in general conformity with the Rules for 1871-72 and the appended Midship Section with a view to Class 90 A1.

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. One decked vessel having a short raised quarter deck

How are the surfaces preserved from oxidation? Inside Cement and Paint Outside Paint

I am of opinion this Vessel should be Classed + 90 A1

The amount of the Entry Fee ... £ 3 : 9 : 0 is received by me,

Nm Special ... £ 11 : 11 : 0

Certificate ... Gratis

(Travelling Expenses)
(if any) £ —

Committee's Minute 22nd Nov 1872

Character assigned 90 A1

Saml. Lapham

This vessel appears to be capable of being classed 90 A1 as recommended.

Lloyd's Register Foundation