

# IRON SHIP.

No. 4306 Survey held at Glasgow Date, First Survey 26<sup>th</sup> April Last Survey 27<sup>th</sup> Sept. 1876

On the Barque West Glen Master Wm. Thomson

TONNAGE under Tonnage Deck } 696.20  
~~Ditto of Third, Spar, or Awning Deck.~~  
~~Ditto of Poop, or Raised Qr. Dk.~~ 9.71  
~~Ditto of Houses on Deck~~ 14.19  
~~Ditto of Forecastle~~  
 Gross Tonnage 720.10  
 Less Crew Space 20.12  
 Less Engine Room  
 Register Tonnage 699.98 as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
~~SPAR, OR AWNING DECKED VESSEL.~~  
 HALF BREADTH (moulded) 15.50  
 DEPTH from upper part of Keel to top of Upper Deck Beams 20.42  
 GIRTH of Half Midship Frame (as per Rule) 31.46  
 1st NUMBER 67.38  
 1st NUMBER, if ~~THREE DECKED VESSEL~~ [deduct 7 feet]  
 LENGTH 176.75  
 2nd NUMBER 11909  
 PROPORTIONS—Breadths to Length 5.70  
 Depths to Length—Upper Deck to Keel 1.17  
 Main Deck ditto 8.65

Built at Glasgow  
 When built 1876 Launched 22<sup>nd</sup> Sept. 1876  
 By whom built Dobie & Co.  
 Owners L. Hodgson & Dalhousie  
 Port belonging to Liverpool  
 Destined Voyage Valparaiso  
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 176 9 BREADTH—Moulded 31 DEPTH top of Floors to Upper Deck Beams 18 8 1/2 Power of Engines — Horse. — N<sup>o</sup>. of Decks with flat laid One N<sup>o</sup>. of Tiers of Beams Two

Dimensions of Ship per Register, length, 188.4 breadth, 31.1 depth, 18.65

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	8 x 2 3/8	8 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	22	22	PLATES in Garboard Strakes, breadth and thickness	34 1/2 x 10	32 x 10	32 x 10
STEM, moulding and thickness	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	22	22	ness from Garboard to upper part of Bilges	9-8	9-8	9-8
STERN-POST for Rudder do. do.	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	7 x 2 3/8	22	22	of doubling at Bilge, or increased thickness, and length applied	—	—	—
for Propeller	—	—	—	—	—	—	—	—	fm up. part of Bilge to Lr. edge of Sh'rstrake	9-8	9-8	9-8
Distance of Frames from moulding edge to moulding edge, all fore and aft	22	22	22	22	22	22	22	22	Main Sheerstrake, breadth and thickness	36 x 11	36 x 10	36 x 10
FRAMES, Angle Iron, for 3/4 length amidships	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	—	—	—
Do. for 1/4 at each end	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	Up. or Spar Dk Sh'rstrake, brdth & thickness	—	—	—
REVERSED FRAMES, Angle Iron	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	Butt Straps to outside plating, breadth & thickness	7 x 10	12 x 8	16 1/2 x 9 1/4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	20 1/2 x 8	20 1/2 x 8	20 1/2 x 8	20 1/2 x 8	20 1/2 x 8	20 1/2 x 8	20 1/2 x 8	20 1/2 x 8	Lengths of Plating	11 ft.	9 1/2	—
thickness at the ends of vessel	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	Shifts of Plating, and Stringers	Two spaces	Two spaces	Two spaces
depth at 3/4 the half-bdth. as per Rule	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	—	—	—
height extended at the Bilges	Twice	Twice	Twice	Twice	Twice	Twice	Twice	Twice	Angle Iron on ditto	—	—	—
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	—	—	—	—	—	—	—	—	Tie Plates fore and aft, outside Hatchways	—	—	—
Single or double Angle Iron on Upper edge	—	—	—	—	—	—	—	—	Diagonal Tie Plates on Beams, No. of Pairs,	—	—	—
Average space	—	—	—	—	—	—	—	—	Plankbender material and scantling	—	—	—
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	Waterways do. do.	—	—	—
Single or double Angle Iron, on Upper Edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	Flat of Upper Deck do. do.	—	—	—
Average space	44	44	44	44	44	44	44	44	How fastened to Beams	—	—	—
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	7 1/2 x 7	7 1/2 x 7	7 1/2 x 7	7 1/2 x 7	7 1/2 x 7	7 1/2 x 7	7 1/2 x 7	7 1/2 x 7	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	35 x 8	35 x 8	35 x 8
Single or double Angle Iron on Upper Edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	Is the Stringer Plate attached to the outside plating?	Yes	Yes	Yes
Average space	44	44	44	44	44	44	44	44	Angle Irons on ditto, No. 1	4 1/2 x 3 1/2 x 7	4 1/2 x 3 1/2 x 7	4 1/2 x 3 1/2 x 7
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	13 x 10	13 x 10	13 x 10	13 x 10	13 x 10	13 x 10	13 x 10	13 x 10	Tie Plates, outside Hatchways	10 x 8	10 x 8	10 x 8
" Rider Plate	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	Diagonal Tie Plates on Beams, No. of pairs	—	—	—
" Bulb Plate to Intercoastal Keelson	—	—	—	—	—	—	—	—	Waterways materials and scantlings	Gutter	—	—
" Angle Irons	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	Flat of Middle Deck do. <u>Tie Plates</u>	4	3 1/2	—
" Double Angle Iron Side Keelson	—	—	—	—	—	—	—	—	How fastened to Beams	With 2 Screws	—	—
" Side Intercoastal Plate <u>Wash plates</u>	—	—	—	—	—	—	—	—	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	25 x 7	25 x 7	25 x 7
" do Angle Irons	—	—	—	—	—	—	—	—	Is the Stringer Plate attached to the outside plating?	Yes	Yes	Yes
" Attached to outside plating with angle iron	—	—	—	—	—	—	—	—	Angle Irons on ditto, No. 2	3 1/2 x 3 1/2 x 7	3 1/2 x 3 1/2 x 7	3 1/2 x 3 1/2 x 7
BILGE Angle Irons	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	3 1/2 x 3	Stringer or Tie Plates, outside Hatchways	6 x 3 x 8	6 x 3 x 8	6 x 3 x 8
" do Bulb Iron	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	Flat of Lower Deck <u>Diagonal at Fore &amp; Main</u>	10 x 7	10 x 7	10 x 7
" do Intercoastal plates riveted to plating for length	—	—	—	—	—	—	—	—	Ceiling betwixt Decks, thickness and material	Sharring	—	—
BILGE STRINGER Angle Irons	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	4 1/2 x 3 1/2	in hold <u>Per side Pitch Plate</u>	2 1/2	2 1/2	2 1/2
Intercoastal plates riveted to plating for length	—	—	—	—	—	—	—	—	Main-piece of Rudder, diameter at head	4 3/4	4 3/4	4 3/4
SIDE STRINGER Angle Irons	—	—	—	—	—	—	—	—	do. at heel	2 3/4	2 3/4	2 3/4

Transoms, material. Knight-heads. Hawse Timbers. Iron  
 Windlass British Oak Pall Bitt Iron

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to lower deck and to main 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 4 1/2 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 3/8 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 3/8 ins. from centre to centre.

Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double ~~riveted~~ riveted; with rivets 3/4 in. diameter, averaging 3 3/8 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 3/8 ins. from cr. to cr.

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

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.

Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting No single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double ~~or riveted~~ Riveted?

Waterway, how secured to Beams Gutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? By knees turned down No. of Breasthooks, Six Crutches, Five

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

Manufacturer's name or trade mark, Angles and Bulbs, Dalziel, Plate Co.

The above is a correct description.

Builder's Signature, Dobie & Co. Surveyor's Signature, Samuel Lapham

Surveyor to Lloyd's Register of British and

(Row 468-0269)



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* 170725

Masts, Bowsprit, Yards, &c., are *all* 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 *Three Masts Barque Rigged*

*Iron, Consett, B.* Bowsprit 32 x 25 at Bed, 17 1/2 at Cap, 19 at Head - 3 plates in Chole 6 1/2 x 16 } double riveted edges  
*Hol & Cold Heated* Fore Mast 69.9 x 25 at Partners 17 1/2 at Head 19 at Head - 3 do 7 1/2 x 16 } double riveted edges  
*Pitch Pine* Main Mast 71.6 x 25 " " 17 1/2 " 19 " - 3 do 7 1/2 x 16 } double riveted edges  
*Iron, Consett, B.* Mizzen Mast 69.9 x 18 } 2 plates in circle 5 1/2 x 3 } single riveted edges  
*Consett, B.* Fore & Main Yards 6 1/2 x 16 } do 4 1/2 x 2 } double riveted edges  
*Consett, B.* L. Topmast 57 x 14 1/2 } 2 do 4 1/2 x 2 } double riveted edges

NUMBER for EQUIPMENT 12703

N <sup>o</sup> .	SAILS.	CABLES &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	270	1 9/16	43 9/10	270-1 9/16	43 9/10	Bowers	1	24.0.0	23 7/8	23 1/2	23 10/20
	Fore Top Sails,	3 links out of each 15 fathoms						Stream	1	5.3.14			
	Fore Topmast Stay Sails	proven to a breaking strain of 61 1/10 tons						Stream	1	23.2.14	23.11.3.14	23 1/2	23 10/20
	Main Sails,	Hmpn Strm Cbl	90	1 4/16		90-1 4/16	43 9/10	Stream	1	5.3.0			
	Main Top Sails,	Hawser ...	90	9		90-8		Stream	1	20.2.0	21 3/6	20	20 14/20
	and	Towlines ...	90	7		90-5		Stream	1	5.1.0			
		Warp ...	90	5				Stream	1	10.1.17	10.10.0	10	
		quality <i>New</i>	90	5				Kedges	1	5.1.10	6.11.1	5	
			90	5				Kedges	1	2.2.0	4.10.0	2 1/2	

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *Four* Long Boatsand  
The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Hayes Fair & Co. Good*

Engine Room Skylights.—How constructed? — How secured in ordinary weather? —

What arrangements for deadlights in bad weather? —

Coal Bunker Openings.—How constructed? — How are lids secured? — Height above deck? —

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Three side ports, three scuppers and two side pipes each side*

Cargo Hatchways.—How formed? *Plato and Angle iron*

State size Main Hatch *14.8" x 10"* Forehatch *5.6" x 5.0"* Quarterhatch *5.6" x 5.0"*

If of extraordinary size, state how framed and secured? *A portable Beam at Main Hatch*

What arrangement for shifting beams? *Yes*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>167</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	1876—April 26. 29. May 3. 8. 11. 15. 16. 27
Date <i>March 29/76</i>	2nd. On the plating during the process of riveting	May 26. 30. June 1. 6. 9. 12. 19. 24
Order for Ordinary Survey No. <i>2</i>	3rd. When the beams were in and fastened, and before the decks were laid...	June 26. 29. July 4. 6. 11. 21. 25.
Date	4th. When the ship was complete, and before the plating was finally coated or cemented..	Augt. 1. 7. 9. 11. 15. 21. 22. 28
No. <i>87</i> in builder's yard.	5th. After the ship was launched and equipped	Sept. 1. 7. 14. 20. 27 <sup>th</sup>

General Remarks (State quality of workmanship, &c.)

*The workmanship is of good quality—Built in accordance with Midship and Longitudinal Sketches herewith approved per Secretary's Letter of 8<sup>th</sup> Feby. 1876 and in general conformity with the Rules with a view to the grade contemplated*

*Fitted with Quarter Deck 35 feet long raised above Main Deck 15 ins. Midship House 28' x 10' 9" and Anchor deck forward 19 ft long.*

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

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

I am of opinion this Vessel should be Classed *100 A1*

The amount of the Entry Fee ... £ 5 : : : is received by me, *By 21st, Saml Laphorn*  
Special ... £ 35 : : : *Sept. 1876*  
Certificate ... *Private*

(Travelling Expenses, if any, £ —).

Committee's Minute *29 September 1876*

or assigned *TRM*

