

# IRON SHIP.

1882 JULY, 82

No. *544* Survey held at *Dumbarton* Date, First Survey *4 Aug. 1881* Last Survey *6<sup>th</sup> July* 1882

On the *Screw Steamer* *Stratheden*.

ONNAGE under Tonnage Deck	1127.19	ONE, OR TWO DECKED, THREE DECKED VESSEL.
Net Tonnage	30.00	SPAR, OR AWNING DECKED VESSEL.
Net Tonnage of Upper Deck	130.28	Half Breadth (moulded) ... .. 18.95
Net Tonnage of Lower Deck	130.97	Depth from upper part of Keel to top of Upper Deck Beams 17.75
Net Tonnage of Forecastle	35.97	Girth of Half Midship Frame (as per Rule) ... 32.4
Gross Tonnage	1401.74	1st Number ... .. 69.1
Less Crew Space	60.37	1st Number, if 3-Decked Vessel deduct 7 feet
Less Engine Room	467.88	Length ... .. 261.6
Register Tonnage as out on Beam	933.86	2nd Number ... .. 18076
		Proportions— Breadths to Length ... .. 6.9
		Depths to Length—Upper Deck to Keel ... .. 14.7
		Main Deck ditto ... ..

Master *George Wilson*  
 Built at *Dumbarton*  
 When built *1881-82* Launched *6 May 1882*  
 By whom built *A. Murray & Co.*  
 Owners *Jas. Hay & Son*  
 Residence *Glasgow*  
 Port belonging to *Glasgow*  
 Destined Voyage  
 If Surveyed while Building, Afloat, or in Dry Dock.  
*While Building & Afloat.*

LENGTH on deck as per Rule ...	Feet. 261	Inches. 7	BREADTH—Moulded... ..	Feet. 37	Inches. 11	DEPTH top of Floors to Upper Deck Beams ... ..	Feet. 14	Inches. 9	Power of Engines ... ..	Horse. 200	Nº. of Decks with flat laid one	Nº. of Tiers of Beams two
Dimensions of Ship per Register, length, 263 breadth, 38.2 depth, 14.65 moulded depth 17 ft.												
KEEL, depth and thickness ... ..	36	15/16	36	15/16	8 1/2	2 1/2	8 1/2	2 1/2				
STEM, moulding and thickness ... ..	8 1/2	2 1/2	8 1/2	2 1/2	8 1/2	5	8 1/2	5				
STERN-POST for Rudder do. do. ... ..	8 1/2	5	8 1/2	5	24	ins	24	ins				
" for Propeller ... ..	24	ins	24	ins								
Distance of Frames from moulding edge to moulding edge, all fore and aft ... ..												
FRAMES, Angle Iron, for 1/2 length amidships ... ..	4 1/2	3	7	4 1/2	3	7						
Do. for 1/4 at each end ... ..	3	3	7	3	3	7						
REVERSED FRAMES, Angle Iron ... ..	3	3	7	3	3	7						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... ..												
" thickness at the ends of vessel ... ..												
" depth at 1/4 the half-bdth. as per Rule ... ..												
" height extended at the Bilges ... ..												
BEAMS, Angle Iron, for 1/2 length amidships ... ..	9 1/2	3	9	9 1/2	3	9						
Do. for 1/4 at each end ... ..	3 1/2	3	9	3 1/2	3	9						
BEAMS, Main, or Middle Deck ... ..	10	10	10	10	10	10						
Single or double Angle Iron, Plate or Tee Bulb Iron ... ..	4 1/2	9	4 1/2	9	4 1/2	9						
Single or double Angle Iron on Upper Edge ... ..	8 1/2	9	8 1/2	9	8 1/2	9						
Average space ... ..	24	ins	24	ins								
BEAMS, Lower Deck ... ..	10	10	10	10	10	10						
Single or double Angle Iron, Plate or Tee Bulb Iron ... ..	4 1/2	9	4 1/2	9	4 1/2	9						
Single or double Angle Iron on Upper Edge ... ..	8 1/2	9	8 1/2	9	8 1/2	9						
Average space ... ..	24	ins	24	ins								
BEAMS, Hold, or Orlop Forecastle ... ..	7	7	7	7	7	7						
Single or double Angle Iron, Plate or Tee Bulb Iron ... ..	3	3	6	3	3	6						
Single or double Angle Iron on Upper Edge ... ..	4 1/2	9	4 1/2	9	4 1/2	9						
Average space ... ..	24	ins	24	ins								
KEELSONS Centre line, single or double plate, ... ..	36	10	36	10								
" Rider Plate ... ..	46	8		8								
" Bulb Plate to Intercoastal Keelson ... ..												
" Angle Irons ... ..												
" Double Angle Iron Side Keelson ... ..												
" Side Intercoastal Plate ... ..												
" Attached to outside plating with angle iron ... ..	3	3	6	3	3	6						
BILGE Angle Irons ... ..	22	7	22	7								
" do. Bulb Iron ... ..												
" do. Intercoastal plates riveted to plating for length ... ..												
BILGE STRINGER Angle Irons ... ..	5	4	9	5	4	9						
Intercoastal plates riveted to plating for half length ... ..												
IDE STRINGER Angle Irons ... ..												

FRAMES extend in one length from *Bilge to Bilge and from Bilge to gunwale*  
 REVERSED ANGLE IRONS on floors and frames extend *from Bilge to middle line to hold beam stringer and to upper st* alternately  
 LSONS. Are the various lengths of Plates and Angle Irons properly connected? *Yes* And butts properly shifted? *Yes*  
 RING. Garboard, double riveted to Keel, with rivets *1* in. diameter, averaging *4 1/4* 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 1/2* ins. from centre to centre.  
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *3/4* in. diameter averaging *3 1/2* ins. from centre to centre.  
 Butts of *3* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *1/6* 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 1/2* ins. from cr. to cr.  
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *3 1/2* ins. from cr. to cr.  
 Edges of Main Sheerstrake, double or single riveted.  
 Butts of Main Sheerstrake, treble riveted for *1/2* length amidships.  
 Butts of Main Stringer Plate, treble riveted for *1/2* length amidships.  
 Butts of Upper or Spar Sheerstrake, treble riveted *1/2* length amidships.  
 Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length.  
 Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting  
 Butt Strs of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Treble & Double* No. of Breasthooks, *4* Crutches, *Deep floors*  
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Mosscund and*  
 Manufacturer's name or trade mark, *Consett*  
 The above is a correct description  
 Builder's Signature, *James Murray & Co.* Surveyor's Signature, *C. J. Dodd*  
 Surveyor to Lloyd's Register of British and Foreign Shipping.



Workmanship.

Are the butts of plating planed or otherwise fitted?

Planed

5776. gcs

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 Iron 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 The two Iron Masts have been constructed in accordance with approved tracing attached herewith, see Secretary's letter 17 Oct. 1881.

NUMBER for EQUIPMENT 1884		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
No. one unit-	SAILS.	CABLES, &c.										
		Chain		135-1/2	1 1/8	5 1/2	20-1/8					
	Fore Sails,	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)		6 Jan 1882	7 3/4							
	Fore Top Sails,	Iron Stream Chain		75-1/2	1 1/8	20-3	75-1/8					
		or Steel Wire				30-4						
	Fore Topmast Stay Sails,	or Hempen Strm Cable		24 Dec 1881								
		Towline, Hemp.		90	11		90-11"					
		or Steel Wire										
	Main Sails,	Hawser		90	9		90-9"					
	Main Top Sails, and	Warp		90	7		90-7"					
		quality good										

Standing and Running Rigging wire & manilla sufficient in size and good in quality. She has 2 Long Boat and 2 others

The Windlass is Rapiers Capstan good and Rudder good Pumps good

Engine Room Skylights. How constructed? Leak on Iron How secured in ordinary weather? Bolted

What arrangements for deadlights in bad weather? Hinged

Coal Bunker Openings. How constructed? Hot & Cast Iron How are lids secured? Hatches & Bayonet Height above deck? 2 ins & flush

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? open Bulwarks aft.

Forward 3 Ports, 3 scuppers & one mooring port.

Cargo Hatchways. How formed? 8 1/2 plates - 3 ft - 6 ins high

State size Main Hatch 34 ft x 14 ft & 26 x 12 - 11 Fore hatch 18 - 11 x 12 ft Quarter hatch 12 ft x 11 ft

If of extraordinary size, state how framed and secured? 2 web plates and 10 1/8 Doubling round large Hatchways

What arrangement for shifting beams?

Hatches, If strong and efficient? Yes.

Order for Special Survey No. 1615	1st. On the several parts of the frame, when in place, and before the plating was wrought	Specially Surveyed: - 1881: - Aug 4, 8, 11, 15, 18, 22,	
Date 20 June 1881	2nd. On the plating during the process of riveting	29 Sep. 1, 8, 20, 26; Oct 3, 7, 10, 13, 17, 19, 24, 27, 31; Nov 3, 7,	
Order for Ordinary Survey No.	3rd. When the beams were in and fastened, and before the decks were laid....	10, 14, 17, 21, 28; Dec 1, 5, 8, 12, 16, 22, 27; Jan 9, 12, 20, 15, 30; Feb 2, 6,	
Date	4th. When the ship was complete, and before the plating was finally coated or cemented...	9, 14, 20, 23, 28; Mar 6, 13, 16, 20, 22, 27, 30; Apr 3, 10, 17, 24,	
No. 108 in builder's yard.	5th. After the ship was launched and equipped	27; May 3, 4, 9, 11, 16, 31; June 14, 24, 27, July 3, 4, 6.	

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

The workmanship is good, and the vessel has been built in accordance with the drawings, & in numbers, and with the instructions contained in the Secretary's letters of the 24<sup>th</sup> May, 24<sup>th</sup> June, 21<sup>st</sup> July, 29<sup>th</sup> Aug., 7<sup>th</sup> Sep. 1881, 17<sup>th</sup> Oct. and 28<sup>th</sup> Feb. 1882.

She is built on the cellular bottom principle, and has ballast tanks all fore and aft, the Fore Tank is 88 ft long and contains 119 tons; Midship tank is 60 ft long and contains 130 tons, and the after tank is 68 ft long with 118 tons. She also has a fore peak tank containing 34 tons and an after peak tank with 32 tons. These tanks have been tested with water pressure to the height required and found satisfactory.

Length of Raised Quarter Deck 95 1/2 ft; Bridge 54 ft and Forecastle 35 ft.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)

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

I am of opinion this Vessel should be Classed +100 A.1.

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me,

Special ... £ 60 : 1 : 0 15/4 1882

Certificate ... £ 65 : 1 : 0

(Travelling Expenses, if any, £ )

Committee's Minute

Character assigned

Surveyor to Lloyd's Register of British and Foreign Shipping.

This record appears eligible to be

classed 100 A.1.

Lloyd's Register

Foundation

one Deck (Part Iron)

Two Trs Bns