

IRON SHIP

No. 1574 Survey held at Leith & Hartholpool Date, First Survey 25th August 1879 Last Survey 2nd March 1880
 On the Screw Steamer "George Gowland" Master Robert Meldrum

TONNAGE under 498.42 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Tonnage Deck 29.54 SPAR, OR AWNING DECKED VESSEL.
 Ditto of Hatchways 38.11
 Ditto of Poop, or Raised Or. Dk. 5.15
 Ditto of Houses on Deck 21.32
 Ditto of Forecastle 592.54
 Gross Tonnage 26.91
 Less Engine Room 189.62
 Register Tonnage 376.01
 as cut on Beam

HALF BREADTH (moulded) 14 Feet.
 DEPTH from upper part of Keel to top of Upper Deck Beams 16.08
 GIRTH of Half Midship Frame (as per Rule) 26.8
 1st NUMBER 56.88
 1st NUMBER, if a 2 DECKED VESSEL, deduct 7 feet
 LENGTH 169
 2nd NUMBER 962.72
 PROPORTIONS—Breadths to Length 6.03
 Depths to Length—Upper Deck to Keel 10.51
 Main Deck ditto

Built at Leith
 When built 1879-80 Launched 24th Jan 80
 By whom built Ramage & Ferguson
 Owners George Gowland
 Port belonging to London
 Destined Voyage Coasting
 If Surveyed while Building, Afloat, or in Dry Dock.
Whilst building & afloat.

LENGTH on deck as per Rule 169 Feet. Inches. BREADTH—Moulded... 28 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 14 Feet. Inches. 9 1/2 Power of Engines 95 Horse. No. of Decks with flat laid One No. of Tiers of Beams One hold

Dimensions of Ship per Register, length, 170.0 breadth, 28.3 depth, 13.5

KEEL, depth and thickness 6 3/4 x 2 1/2
 STEM, moulding and thickness 6 3/4 x 2 1/2
 STERN POST for Rudder do. do. 6 3/4 x 4 1/2
 " " for Propeller 6 3/4 x 4 1/2
 Distance of Frames from moulding edge to moulding edge, all fore and aft 22 ins
 FRAMES, Angle Iron, for 1/2 length amidships 3 1/2 x 3
 Do. for 1/4 at each end 3 1/2 x 3
 REVERSED FRAMES, Angle Iron 3 x 2 1/2
 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships As per Sketches
 " thickness at the ends of vessel As per Sketches
 " depth at 3/4 the half-bdth. as per Rule As per Sketches
 " height extended at the Bilges As per Sketches
 BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 5 x 3
 Single or double Angle Iron on Upper edge 3 x 2 1/2
 Average space 29 ins
 BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 5 x 3
 Single or double Angle Iron on Upper edge 3 x 2 1/2
 Average space 29 ins
 BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 5 x 3
 Single or double Angle Iron on Upper edge 3 x 2 1/2
 Average space 29 ins
 KEELSONS Centre line, single or double plate, box, or Intercoastal Plates 7 1/2 x 6
 " Rider Plate 6
 " Bulb Plate to Intercoastal Keelson 5
 " Angle Irons 3 x 6
 " Double Angle Iron Side Keelson 4 x 3
 " Side Intercoastal Plate 3 x 6
 " do. both Angle Irons at sides of keelsons 3 x 3
 Attached to outside plating with angle iron 3 x 6
 BILGE Angle Irons 4 x 3
 " do. Bulb Iron 6 x 3
 " do. Intercoastal plates riveted to plating for length 4 x 3
 LGE STRINGER Angle Irons 4 x 3
 Intercoastal plates riveted to plating for length 6 x 3
 IDE STRINGER Angle Irons 4 x 3
 Transoms, material Iron Knight-heads Iron Hawse Timbers Iron
 Windlass Iron Pall Bitt Iron

Flat Keel Plates, breadth and thickness 32 Inches. In Ship. 10-8 16ths. In Ship. 32 Inches. per Rule 10-8 16ths. per Rule
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges 8-7
 " of doubling at Bilge, or increased thickness, and length applied 7-6
 " fin up part of Bilge to l.r. edge of Sh'rstrake. 33 3/4 7-6 33 1/4 10-8
 " Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. 33 3/4 10-8
 " Up or Spar Dk Sh'rstrake, breadth & thickness 16 3/4 x 1 1/2
 Butt Straps to outside plating, breadth & thickness 7.6 x 5
 Lengths of Plating 213
 Shifts of Plating, and Stringers 25
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 22
 Angle Iron on ditto 4 x 3 x 6
 Tie Plates fore and aft, outside Hatchways Iron Deck
 Diagonal Tie Plates on Beams No. of Pairs 5
 Planksheer material and scantling 5
 Waterways do. do. 5
 Flat of Upper Deck do. do. Riveted
 How fastened to Beams Riveted
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 25
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 25
 Tie Plates, outside Hatchways 25
 Diagonal Tie Plates on Beams, No. of pairs 2
 Waterways materials and scantlings 2
 Flat of Middle Deck do. do. 2
 How fastened to Beams 2
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 2
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 2
 Stringer or Tie Plates, outside Hatchways 2
 Flat of Lower Deck 2
 Ceiling betwixt Decks, thickness and material 2 1/2
 " in hold do. 2 1/2
 Main piece of Rudder, diameter at head 4 1/2
 do. at heel 2 1/2
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. Four Thickness of 1 1/2
 " Height up upper deck
 " How secured to sides of ship double frames
 " Size of Vertical Angle Irons 3 x 2 1/2 x 7/16 and distance apart 30 ins.
 " Are the outside Plates doubled two spaces of Frames in length? Yes

The FRAMES extend in one length from Middle line to Gunwale Riveted through plates with 3/4 in. Rivets, about 10 apart.
 The REVERSED ANGLE IRONS on floors and frames extend are in keelson middle line to tank sides & continued alternately to Bilge, stringer, gunwale 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 3 5/8 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 7/8 in. diameter averaging 3 5/8 x 3 1/8 ins. from centre to centre.
 " Butts of two Strakes at Bilge for half length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.
 " Edges from bilge to Main Sheerstrake, worked clencher, double or single 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 or single riveted. Upper Sheerstrake, double or single riveted.
 " Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.
 " Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.
 " Breadth of laps of plating in double riveting 5 3/8 x 4 3/4 Breadth of laps of plating in single riveting 3.
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble & double
 Waterway, how secured to Beams (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Molded knees No. of Breasthooks, Four Crutches, One
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good
 Manufacturer's name or trade mark, Angles - Mossend. Plates - Consett.
 The above is a correct description.
 Builder's Signature, Ramage & Ferguson Surveyor's Signature, John Law Bird
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON SHIP - 0323

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

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

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

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

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

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

Masts, Bowsprit, Yards, &c., are *P. 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

NUMBER for EQUIPMENT	Fathoms.	Inches.	Test per Certificate	Inches per Rule.	Machine where Tested & Suprtd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	W't req'd per Rule.	Machine where Tested & Suprtd.
SAILS.						Bower Anchors					
No. 1	195	1 1/2	25 3/8	1 1/2	100	(State Machine where Tested, Date, & No. of Certificate, & Name of Superintendent.)	4874	12-1-21	14-6-1-0	12-1-0	
Fore Sails,						Stream	4875	11-3-14	13-15-0-0	11-3-0	
Fore Top Sails,	60	1 1/2	11 3/8	60	1 1/2		4876	10-1-11	12-6-2-7	10-1-0	
Fore Topmast Stay Sails,	45	9		75-9			4880	11-1-5	6-15-0-0	4-0-0	
Main Sails,	70	6		40-7				2-0-4	4-12-2-0	2-0-0	
Main Top Sails,		5						1-1-0		1-0-0	
and											

Standing and Running Rigging *galvanized wire* sufficient in size and *good* in quality. She has *Two* Life Boats and *each 19 ft x one dingy 14 ft*

The Windlass *and* Capstan *good* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Plak Comings on top of Casings* How secured in ordinary weather? *Bolts & nuts.*

What arrangements for deadlights in bad weather? *Leak Covers & bulls eyes.*

Coal Bunker Openings. How constructed? *Self Trimming Hatchways* How are lids secured? *With dead & check* Height above deck? *13 ins.*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Three ports 24 x 15 & four scuppers*

Cargo Hatchways. How formed? *Plates 3 ft 5 in deep & 3/4 thick riveted to Gun. Half beam & Iron deck*

State size Main Hatch *As shown on Sketches* Quarterhatch

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Shifting beams as shown on long & deck plans & two fore & afters in each.*

Hatches, If strong and efficient?

Order for Special Survey No. <i>265</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	Build under Special Survey & Surveyed 1879 Aug 25. 29
Date <i>5th Sept 1879</i>	2nd. On the plating during the process of riveting	Sept 2. 4. 5. 26. 27. 29. Oct 12. 14. 6. 7. 10. 13. 15. 18. 20. 24. 27. 31
Order for Ordinary Survey No. <i>610</i>	3rd. When the beams were in and fastened, and before the decks were laid...	Nov 3. 7. 10. 12. 15. 17. 20. 24. 25. 28. 29 Dec 2. 5. 6. 8. 10. 15. 19
Date <i>15th Sept 1880</i>	4th. When the ship was complete, and before the plating was finally coated or cemented...	Dec 23. 24. 31 1880. Jan 3. 7. 8. 12. 14. 15. 16. 19. 21. 23. 24. 26. 27
No. <i>15</i> in builder's yard.	5th. After the ship was launched and equipped	Hartlepool. Feb 1

General Remarks (State quality of workmanship, &c.) *Workmanship & material of a good quality*

This Vessel has been built in accordance with the accompanying approved Sketches, 3 no. & with the Rules.

Ming boards of 2 Swedish w. fir have been fitted for Forecastle 26 ft long Poop 20 ft & Double bottom 128 ft x 4

Hartlepool 2nd March 1880 Tested inner bottom by a head of water to the height of load line & found tight
all plates done

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

How are the surfaces preserved from oxidation? Inside *Cement & oxide of Iron* Outside *oxide of Iron & Red rust*

I am of opinion this Vessel should be Classed

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

Special ... £ *29 13 0* 2nd March 1880

Certificate ...

(Travelling Expenses, if any, £ *✓*).

Committee's Minute

Friday, March, 5th 1880

Character assigned

Log A. R. P. Iron St. 128 ft

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

This vessel appears to be eligible to

classd 90A1 as recommended

1880 Iron St. Double Bottom 128 ft

573/100