

IRON SHIP.

No. 2721 Survey held at *Belfast* Date, First Survey *22 April 80* Last Survey *14 November 1880*
 On the Iron screw steamer "William Hinde" Master *R. Lyle*

Tonnage under Tonnage Deck 276.72
 Ditto of Third, Spar, or Awning Deck 48.93
 Ditto of Poop, or Raised Qr. Dk. 15.82
 Ditto of Houses on Deck 1.70
 Ditto of Forecastle Wing 1.70
 Less Tonnage 346.31
 Less Crew Space
 Less Engine Room
 Register Tonnage as cut on Beam 178.90

ONE, OR TWO DECKED, THREE DECKED VESSEL
 SPAR, OR AWNING-DECKED VESSEL.
 HALF BREADTH (moulded) 11.25
 DEPTH from upper part of Keel to top of Upper Deck Beams 13.25
 GIRTH of Half Midship Frame (as per Rule) 22.08
 1st NUMBER 46.58
 1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet
 LENGTH 158.92
 2nd NUMBER 7402
 PROPORTIONS Breadth to Length 7.66
 Depths to Length Upper Deck to Keel 11.9
 Main Deck ditto

Built at *Belfast*
 When built 1880 Launched 21 October 80
 By whom built *Worham, Clark & Co*
 Owners *William Hinde*
 Port belonging to *Belfast*
 Destined Voyage *Coasting*
 Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 158 Feet 11 Inches BREADTH Moulded 22 Feet 6 Inches DEPTH top of Floors to Upper Deck Beams 11 Feet 11 Inches Do. do. Main Deck Beams 11 Feet 11 Inches Power of Engines 60 Horse. No. of Decks with flat laid one No. of Tiers of Beams one

Dimensions of Ship per Register, length, 160.7 breadth, 22.7 depth, 11.75

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
KEEL, depth and thickness	7 1/4 x 17/8	7 1/4 x 17/8	7 1/4 x 17/8	6 1/2 x 17/8	6 1/2 x 17/8	6 1/2 x 17/8
STEM, moulding and thickness	7 1/4 x 17/8	7 1/4 x 17/8	7 1/4 x 17/8	6 1/2 x 17/8	6 1/2 x 17/8	6 1/2 x 17/8
STERN-POST for Rudder do. do.	6 7/8 x 3 7/8	6 7/8 x 3 7/8	6 7/8 x 3 7/8	6 1/2 x 3 3/4	6 1/2 x 3 3/4	6 1/2 x 3 3/4
" for Propeller	6 7/8 x 4	6 7/8 x 4	6 7/8 x 4	6 1/2 x 4	6 1/2 x 4	6 1/2 x 4
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	21	21	21	21	21
FRAMES, Angle Iron, for 1/2 length amidships	3	3	3	3	3	3
Do. for 1/4 at each end	3	3	3	3	3	3
REVERSED FRAMES, Angle Iron	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	16	16	16	16	16	16
" thickness at the ends of vessel	7	7	7	7	7	7
" depth at 1/4 the half-bdth. as per Rule	8	8	8	8	8	8
" height extended at the Bilges	32	32	32	32	32	32
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4	4	4	4	4	4
Single or double Angle Iron on Upper edge	21	21	21	21	21	21
Average space	21	21	21	21	21	21
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	6	6	6	6	6	6
Single or double Angle Iron on Upper Edge	4	4	4	4	4	4
Average space	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	4	4	4	4	4	4
Single or double Angle Iron on Upper Edge	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2
Average space	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	12	12	12	12	12	12
" Rider Plate	10	10	10	10	10	10
" Bulb Plate to Intercoastal Keelson	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
" Double Angle Iron Side Keelson	3	3	3	3	3	3
" Side Intercoastal Plate	2	2	2	2	2	2
" do. Angle Irons	2	2	2	2	2	2
" Attached to outside plating with angle iron	2	2	2	2	2	2
BILGE Angle Irons	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
" do. Bulb Iron	6	6	6	6	6	6
" do. Intercoastal plates riveted to plating for length	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
BILGE STRINGER Angle Irons	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Intercoastal plates riveted to plating for Bulb 3/5 length	6	6	6	6	6	6
SIDE STRINGER Angle Irons	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2

	Inches in Ship	Inches per Rule	Inches in Ship	Inches per Rule
Flat Keel Plates, breadth and thickness	30	30	30	30
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	7	7	7	7
" of doubling at Bilge, or increased thickness, and length applied	8	8	8	8
" fm up part of Bilge to l. edge of Sh'rstrake.	7	7	7	7
" Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	33	33	33	33
" Up. or Spar Dk Sh'rstrake, brdth & thickness	11	11	11	11
Butt Straps to outside plating, breadth & thickness	12 1/2	12 1/2	12 1/2	12 1/2
Lengths of Plating	12 1/2	12 1/2	12 1/2	12 1/2
Shifts of Plating, and Stringers	42	42	42	42
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	23	23	23	23
Angle Iron on ditto	3 1/2 x 3 x 6	3 1/2 x 3 x 6	3 1/2 x 3 x 6	3 1/2 x 3 x 6
Tie Plates fore and aft, outside Hatchways	5	5	5	5
Diagonal Tie Plates on Beams No. of Pairs	5	5	5	5
Planksheer material and scantling	3	3	3	3
Waterways do. do.	3	3	3	3
Flat of Upper Deck do. do.	3	3	3	3
How fastened to Beams	3	3	3	3
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	3	3	3	3
Is the Stringer Plate attached to the outside plating?	yes	yes	yes	yes
Angle Irons on ditto, No.	2	2	2	2
Tie Plates, outside Hatchways	3 1/2 x 3 x 6	3 1/2 x 3 x 6	3 1/2 x 3 x 6	3 1/2 x 3 x 6
Diagonal Tie Plates on Beams, No. of pairs	5	5	5	5
Waterways materials and scantlings	3	3	3	3
Flat of Middle Deck do. do.	3	3	3	3
How fastened to Beams	3	3	3	3
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	20	20	20	20
Is the Stringer Plate attached to the outside plating?	yes	yes	yes	yes
Angle Irons on ditto, No.	2	2	2	2
Stringer or Tie Plates, outside Hatchways	3 1/2 x 3 x 6	3 1/2 x 3 x 6	3 1/2 x 3 x 6	3 1/2 x 3 x 6
Flat of Lower Deck	3	3	3	3
Ceiling betwixt Decks, thickness and material	2 1/2	2 1/2	2 1/2	2 1/2
" in hold do. do.	2 1/2	2 1/2	2 1/2	2 1/2
Main piece of Rudder, diameter at head	4 1/4	4 1/4	4 1/4	4 1/4
" do. at heel	2 1/2	2 1/2	2 1/2	2 1/2
Can the Rudder be unshipped afloat?	yes	yes	yes	yes
Bulkheads No. 3 Thickness of	4	4	4	4
" Height up	up to upper deck	up to upper deck	up to upper deck	up to upper deck
" How secured to sides of ship	between double frames	between double frames	between double frames	between double frames
" Size of Vertical Angle Irons	2 1/2 x 2 1/2 x 5	2 1/2 x 2 1/2 x 5	2 1/2 x 2 1/2 x 5	2 1/2 x 2 1/2 x 5
" and distance apart	30 ins.	30 ins.	30 ins.	30 ins.
" Are the outside Plates doubled two spaces of Frames in length?	yes	yes	yes	yes

Transoms, material. Knight-heads. Hawse Timbers. *iron*
 Vindlass *Iron patent* Pall Bitt *iron*

The FRAMES extend in one length from *Keel* to *gunwale & rail* Riveted through plates with 3/4 in. Rivets, about 5 apart.
 The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *bilges* 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 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 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 all Strakes at Bilge for 3/5 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 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted. *at lower edge 7/8 rivets*
 Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 3/5 length amidships.
 Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *over half* length.
 Breadth of laps of plating in double riveting 4 1/2 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 *flush* (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? *turned knees welded* No. of Breasthooks, 2 Crutches, 2
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *good*
 Manufacturer's name or trade mark, *Jugles, Mossend, Plate, Hartlepool & Bownfield*

The above is a correct description.
 Builder's Signature, *W. Workman* Surveyor's Signature, *J. W. Bullard*
 Surveyor to Lloyd's Register of British and Foreign Shipping.

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? *yes* 28549 Iron

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
Two wood pole masts as auxiliary to the steam power.

NUMBER for EQUIPMENT 8/42		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.												
CABLES, &c.												
N ^o .	Chain	165-4 1/2 ft	1 7/8	20 Tons	165-1 7/8	20 3/16 in	Bower Anchors	3	8-1-0	10-7-2-0	8 1/4 cwt	10 3/4 cwt
	Fore Sails,	<i>Lloyds proving house Tipton E. R. Isitt Supt 14/10/80.</i>										
	Fore Top Sails,	Iron Str'm Chain	60 1/2	1 1/16	5-5/8	60-4 1/2			8-1-0	10-7-2-0	8 1/4 cwt	10 3/4 cwt
		Fore Topmast Stay Sails,							7-0-0	9-5-0-0	7 cwt	8 3/4 cwt
		Hmpn Strm Cbl	90	7 1/2		7 5/8 in						
		Hawser	90	5		90-5 1/2	Stream	1	2-2-10	5-2-2-0	2 1/2 cwt	5 cwt
	Main Sails,	Towlines					Kedge				1 1/2 cwt	
	Main Top Sails,	Warp					Ditto					
	and	quality	<i>good</i>									

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *two* Long Boats and
The Windlass is *good* Capstan and Rudder *good* Pumps *good*
Engine Room Skylights. How constructed? *Strongly of Teak* How secured in ordinary weather? *Always shipped*
What arrangements for deadlights in bad weather? *Strongly glazed*
Coal Bunker Openings. How constructed? *Circular iron* How are lids secured? *Lugs* Height above deck? *8"*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *7 scuppers and two ports. aft part iron guard clanchous & rails.*
Cargo Hatchways.—How formed? *Plates & angles*
State size Main Hatch *15' 9" x 9' 0"; 15' 9" x 9' 0"* Fore hatch *5' 3" x 5' 0"* Quarter hatch
If of extraordinary size, state how framed and secured?
What arrangement for shifting beams? *Deep iron portable beams and oak fore & afters.*
Hatches, If strong and efficient? *yes solid*

Order for Special Survey No. 97	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	<i>April 22, 29; May 18, 28; June 9, 17 - July 2, 9, 14, 31.</i>
Date <i>6 April 1880</i>		2nd. On the plating during the process of riveting	<i>August 4, 9, 12, 19, 30. Sept 13, 17, 21. Oct 7, 14.</i>
Order for Ordinary Survey No. <i>98</i>		3rd. When the beams were in and fastened, and before the decks were laid...	<i>19, 20, 21, 27 Nov 2, 5 - 8, 17 - 1880.</i>
Date <i>19 April 1880</i>		4th. When the ship was complete, and before the plating was finally coated or cemented...	
No. <i>2</i> in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *This raised quarter deck vessel has been built in accordance with the drawings submitted and approved see Secretary's letters of the 10th March and 13th May 1880, and in other respects to the Rules for the 100 A Grade.*
Length of raised quarter deck 84 ft. Has a forecastle not enclosed, 25 ft long, and a bridge deck 12 feet long, upon contiguous to the raised deck.
Has a ballast tank forward 23 feet long, and one aft 30 ft long both having been tested by water pressure to the height of the load line and found satisfactory.
Materials and workmanship good.
The midship section and profile are forwarded herewith.

State if one, two, or three-decked vessel, or if spar, or awning decked, and the lengths of poop, forecastle, *25 ft* or raised quarter deck, and the length of double, or part double bottom. *84 ft*
How are the surfaces preserved from oxidation? Inside *Cement and paint* Outside *Rain*
I am of opinion this Vessel should be Classed *+ 100 A.1.*
The amount of the Entry Fee ... £ 4 : 0 : 0 is received by me, *J.W.S.*
Special ... £ 17 : 6 : 0 *27/11 1880*
Certificate ... *Good*
(Travelling Expenses, if any, £)

Committee's Minute *Tuesday, November, 30th 1880.*
Character assigned *100 A.1*
Lloyds Register
Appears to be eligible to be one ready anchor ship in other respects appears eligible for the Register.
12th Nov 80

(If a Surveyor are requested not to write on or below the space for Committee's Minute.)