

# IRON SHIP.

(Received at London Office, **WEDNES. 14** 1885)

No. **311** Survey held at **Belfast** Date, First Survey **Aug 20<sup>th</sup> 84** Last Survey **Jan 7<sup>th</sup> 85**  
On the **Iron Screw Steamer "Monarch"**

**Tonnage** under Tonnage Deck **267.84** **ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.**  
Ditto of Third, Spar, or Awning Deck. **-**  
Ditto of **Prop.** or Raised Qr. Dk. **6.20** **Half Breadth** (moulded) **11.25** **Built at** **Belfast**  
Ditto of Houses on Deck **1.24** **Depth** from upper part of Keel to top of Upper Deck Beams **12.45** **When built** **1884** **Launched** **Dec 4<sup>th</sup>**  
Ditto of Forecastle, or Hatchways **9.90** **Girth** of Half Midship Frame (as per Rule) **21.16** **By whom built** **Mac Swaine Lewis & Co.**  
Gross Tonnage **285.26** **1st Number** **44.86** **Owners** **Alexander King**  
Less Crew Space **21.77** **1st Number, if a 3-Decked Vessel** deduct 7 feet **-** **Residence** **Queen's Quay, Belfast**  
Less Engine Room **120.96** **Length** **154** **Port belonging to** **Belfast**  
Register Tonnage **134.53** **2nd Number** **6902.44** **Destined Voyage** **Coasting**  
as cut on Beam **134.53** **Proportions**— Breadths to Length **6.84** **If Surveyed while Building, Afloat, or in Dry Dock.**  
**Depths to Length**— Upper Deck to Keel **12.4** **Specially Surveyed while Building**  
**Main Deck ditto** **-**

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	N <sup>o</sup> . of Decks with flat laid	N <sup>o</sup> . of Tiers of Beams
on deck as per Rule	153	10	Moulded	22	0	top of Floors to Upper Deck Beams	11	4	Engines	60	One	One
Dimensions of Ship per Register, length,	153		breadth,	22		depth,	11					
KEEL, depth and thickness	4	15	Inches in Ship	4	15	Inches per Rule	4	15	Flat Keel Plates, breadth and thickness			
ITEM, moulding and thickness	4	15	Inches in Ship	4	15	Inches per Rule	4	15	PLATES in Garboard Strakes, br'dth & thickness	38	8	30
STERN-POST for Rudder do. do.	4	3	Inches in Ship	4	3	Inches per Rule	4	3	" From Garboard to upper part of Bilges	2	10	2
" " for Propeller	4	3	Inches in Ship	4	3	Inches per Rule	4	3	" Of d'bling at Bilge, or increased thickness, and length applied	2	10	2
Distance of Frames from moulding edge to moulding edge, all fore and aft	21		Inches in Ship	21		Inches per Rule	21		" From up. prt of Bilge to lr. edge of Sh'rstrake	36	10	30
FRAMES, Angle Iron, for 2 length amidships	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" Main Sheerstrake, breadth and thickness	36	10	30
Do. for 1/2 at each end	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" Of d'bling at Sh'stk. & lng. applied			
REVERSED FRAMES, Angle Iron	2	2	Inches in Ship	2	2	Inches per Rule	2	2	" From M'n. to Upr. or Spar Dk. Sh'rstrake			
FLOORS, depth and thickness of Floor Plate	13	6	Inches in Ship	13	6	Inches per Rule	13	6	" Up. or Spar Dk Sh'rstrake, br'dth & thicken'ss			
at mid line for half length amidships	13	6	Inches in Ship	13	6	Inches per Rule	13	6	Butt Straps to outside plating, breadth & thickness	14	10	11
thickness at the ends of vessel	6	3	Inches in Ship	6	3	Inches per Rule	6	3	Lengths of Plating	6	4	5
depth at 3/4 the half-bdth. as per Rule	6	3	Inches in Ship	6	3	Inches per Rule	6	3	Shifts of Plating, and Stringers	2		2
height extended at the Bilges	20		Inches in Ship	20		Inches per Rule	20		Gunwale Plate on ends of <del>Awning, Spar, or</del> Upper Deck Beams, breadth and thickness	30	7	30
BEAMS, Upper, Spar, or Awning Deck	4	2	Inches in Ship	4	2	Inches per Rule	4	2	Angle Iron on ditto	3	3	6
single or double Ang. Iron, Plate or Tee Bulb Iron	4	2	Inches in Ship	4	2	Inches per Rule	4	2	Tie Plates fore and aft, outside Hatchways			
single or double Angle Iron on Upper edge	21		Inches in Ship	21		Inches per Rule	21		Diagonal Tie Plates on Beams No. of Pairs	6		6
Average space	21		Inches in Ship	21		Inches per Rule	21		Flat of Up., Spar, or Awning Dk.	6		6
BEAMS, Main, or Middle Deck	6		Inches in Ship	6		Inches per Rule	6		How fastened to Beams	2	2	2
single or double Ang. Iron, Plate or Tee Bulb Iron	6		Inches in Ship	6		Inches per Rule	6		Stringer Plate on ends of <del>Main or Middle Deck</del> Beams, breadth and thickness	27	5	27
single or double Angle Iron on Upper Edge	3	3	Inches in Ship	3	3	Inches per Rule	3	3	Is the Stringer Plate attached to the outside plating?	Yes		As required
Average space	5	3	Inches in Ship	5	3	Inches per Rule	5	3	Angle Irons on ditto, No.	3	3	6
BEAMS, Lower Deck	5	3	Inches in Ship	5	3	Inches per Rule	5	3	Tie Plates, outside Hatchways	7	5	7
single or double Ang. Iron, Plate or Tee Bulb Iron	5	3	Inches in Ship	5	3	Inches per Rule	5	3	Diagonal Tie Plates on Beams, No. of pairs	7		7
single or double Angle Iron on Upper Edge	42		Inches in Ship	42		Inches per Rule	42		Flat of Middle Deck* do. do.	3	3	3
Average space	42		Inches in Ship	42		Inches per Rule	42		How fastened to Beams			
BEAMS, Hold, or Orlop			Inches in Ship			Inches per Rule			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams			
single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Inches in Ship			Inches per Rule			Is the Stringer Plate attached to the outside plating?			
single or double Angle Iron on Upper Edge	10		Inches in Ship	10		Inches per Rule	10		Angle Irons on ditto, No.			
Average space	7		Inches in Ship	7		Inches per Rule	7		Stringer or Tie Plates, outside Hatchways			
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	7		Inches in Ship	7		Inches per Rule	7		Flat of Lower Deck*			
" Rider Plate	3	3	Inches in Ship	3	3	Inches per Rule	3	3	Ceiling betwixt Decks, thickness and material	2	2	2
" Bulb Plate to Intercoastal Keelson	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" in hold do. do.	2	2	2
" Angle Irons	3	3	Inches in Ship	3	3	Inches per Rule	3	3	Main piece of Rudder, diameter at head	3	3	3
" Double Angle Iron Side Keelson	3	3	Inches in Ship	3	3	Inches per Rule	3	3	do. at heel	3	3	3
" Side Intercoastal Plate	3	3	Inches in Ship	3	3	Inches per Rule	3	3	Can the Rudder be unshipped afloat?	Yes		
" do. Angle Irons	3	3	Inches in Ship	3	3	Inches per Rule	3	3	Bulkheads No. No. per Rule	4		4
" Attached to outside plating with angle iron	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" Thickness of	4		4
ILGE Angle Irons	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" Height up	Upper deck		
" do. Bulb Iron	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" How secured to sides of ship	between double frames		
" do. Intercoastal plates riveted to plating for length	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" Size of Vertical Angle Irons	3 x 3 x 9/16 and distance apart	30 ins.	
ILGE STRINGER Angle Irons	3	3	Inches in Ship	3	3	Inches per Rule	3	3	" Are the outside Plates doubled two spaces of Frames in length?	Yes		
" do. Intercoastal plates riveted to plating for length	3	3	Inches in Ship	3	3	Inches per Rule	3	3				
DE STRINGER Angle Irons	3	3	Inches in Ship	3	3	Inches per Rule	3	3				

FRAMES extend in one length from **Keel** to **gunwale** Riveted through plates with **3/4** in. Rivets, about **6** apart.  
REVERSED ANGLE IRONS on floors and frames extend from **middle line** to **Upper Bilge** and to **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 **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** ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets **3/4** in. diameter averaging **3** ins. from centre to centre.  
Butts of **Two** Strakes at Bilge for **3/2** length, treble riveted with Butt Straps **3/16** 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** ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets **3/4** in. diameter, averaging **3** 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 **3/8** length amidships. Butts of Upper or Spar Sheerstrake, treble riveted **-** length amidships.  
Butts of Main Stringer Plate, treble riveted for **3/4** 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 **2 1/2**  
But Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? **Single & double** No. of Breasthooks, **3** Crutches, **2** deep from  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? **Best**  
Manufacturer's name or trade mark, **Frames, Beams, Keelsons, S. Stockton; Rev. bars Kirk Bros; All plates "Bolted" Vaughan & Co.**  
The above is a correct description.  
Builder's Signature, **Mac Swaine Lewis & Co. Ld.** Surveyor's Signature, **James Curjand's Register**  
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? *very few*

Masts, Bowsprit, Yards, &c., are of *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 *Schooner rigged, with two pole masts, as auxiliary to steam power.*

*Fore Mast, heel to truck 42' 4" x 15" diam*  
*Main " " " 64' 6" x 15" "*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprtd.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprtd.
SAILS.							Bower Anchors	1	4.1.14	9.11.2.7	7 1/4	29 Oct. 84
CABLES, &c.							(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	4.2.14	9.11.2.7	7 1/4	" "
N <sup>o</sup> .	Chain	90	1	24 lbs	165 x 1	30 Oct. 84						
	Fore Sails,	45	1	"	"	"						
	Fore Top Sails,	45	1/2	12 1/2	45 x 11	"						
	Fore Topmast Stay Sails,	45	1/2	12 1/2	23 x 5 1/2	"						
	Main Sails,	90	1 1/2	75 x 7 1/2								
	Main Top Sails,	90	1 1/2	90 x 5 1/2								
	Warp	60	5									
	quality			good								

Standing and Running Rigging *blue hemp* sufficient in size and *good* in quality. She has *one* Long Boat and a dingy.  
The Windlass is *Patent & good* Capstan *-* and Rudder *good* Pumps *good*  
Engine Room Skylights. How constructed? *Leak on Iron Comings* How secured in ordinary weather? *Screw bolts*  
What arrangements for deadlights in bad weather? *34" above Bridge deck*  
Coal Bunker Openings. How constructed? *Cast iron circular* How are lids secured? *Bayonet fixing* Height above deck? *flush*  
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *4 Scuppers, 4 peeing ports, and 2 spring pipes each side*  
Cargo Hatchways. How formed? *of plates and angles, all Comings 30" above deck.*  
State size Main Hatch *19' 0" x 11' 0"* Forehatch *7' 0" x 8' 0"* Quarterhatch *19' 0" x 11' 0"*  
If of extraordinary size, state how framed and secured? *deep web plates in main and quarter hatches*  
What arrangement for shifting beams? *and fore and afters in all*  
Hatches, If strong and efficient? *yes solid*

Order for Special Survey No. *163* 1st. On the several parts of the frame, when in place, and before the plating was wrought *Aug 20, 30; Sep. 4, 10, 12, 19, 26;*  
Date *Sept. 3, 84* 2nd. On the plating during the process of riveting *Oct. 3, 9, 16, 28; Nov. 4, 12, 14, 21, 25, 27;*  
Order for Ordinary Survey No. *-* 3rd. When the beams were in and fastened, and before the decks were laid... *Dec. 1, 4, 8, 11, 19, 23, 1884.*  
Date *-* 4th. When the ship was complete, and before the plating was finally coated or cemented.. *Jan. 2, 7, 1885.*  
No. *23* in builder's yard. 5th. After the ship was launched and equipped  
State dates of letters respecting this case *August 14<sup>th</sup> 1884.*

General Remarks (State quality of workmanship, &c.) *This one decked vessel has been built in accordance with the accompanying approved tracing of Mid Section, in compliance with the Secretary's letter dated as above, and in general conformity with the Rules, where not in excess. The pumping arrangements are precisely as approved for previous vessels of the same type. She has a Forecastle (not enclosed) 27' 9", Bridge (not enclosed) 29' and a short Raised Quarter deck 20' 6" long; a fore peak tank, water capacity in tons 14; and an after peak tank, water capacity in tons 18. The materials used in her construction, and the workmanship are very good.*

State if one, two, or three decked vessel, or if spar, or awning decked, and the lengths of *29' 9"* poop, *27' 9"* bridge, *20' 6"* forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)  
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 .....£ 2 : : : is received by me, *J. L.*  
Special .....£ 14 : 5 : 13. 1. 1885  
(to be sent as per margin). Certificate ...  
(Travelling Expenses, if any, £ ...).  
Committee's Minute  
Character assigned  
*FRIDAY 16 JAN 1885*  
*100 A1*  
*James Surpin*  
Surveyor to Lloyd's Register of British and Foreign Shipping  
*It is submitted that this vessel appears eligible to be classed 100 A1 as recommended 1 Dec 1884*  
Lloyd's Register  
Foundation  
15/1/85