

IRON SHIP.

(Received at London Office, **WEDNESDAY 14** 1885)

No. **311** Survey held at **Belfast** Date, First Survey **Aug 20th 84** Last Survey **Jan 4th 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.** Master **John Wilson**
 Ditto of Third, Spar, or Awning Deck } **Half Breadth** (moulded) **11.25** Built at **Belfast**
 Ditto of ~~Prop.~~ Raised Qr. Dk. } **6.20** **Depth** from upper part of Keel to top of Upper Deck Beams **12.45** When built **1884** Launched **Dec 4th**
 Ditto of Houses on Deck } **1.24** **Girth** of Half Midship Frame (as per Rule) **21.16** By whom built **Mac Swaine Lewis & Co.**
 Ditto of Forecastle ~~Beams~~ of Hatchways } **9.90** **1st Number** **44.86** Owners **Alexander King**
 Gross Tonnage **285.26** **1st Number, if a 3-Decked Vessel** .. deduct 7 feet - Residence **Queen's Quay, Belfast**
 Less Crew Space **21.77** **Length** **154** Port belonging to **Belfast**
 Less Engine Room **203.49** **2nd Number** **6902.44** Destined Voyage **Coasting**
 Register Tonnage as cut on Beam } **134.53** **Proportions**— Breadths to Length **6.84** If Surveyed while Building, Afloat, or in Dry Dock. **Specially Surveyed while Building**
 Depths to Length—Upper Deck to Keel **12.4** Main Deck ditto

LENGTH on deck as per Rule **153** **BREADTH** Moulded **22** **DEPTH** top of Floors to Upper Deck Beams **11** **Feet. Inches.** **Feet. Inches.** **Horse.** **No. of Decks with flat laid** **One**
 Dimensions of Ship per Register, length, **154** breadth, **22.7** depth, **11.3** **Depth moulded** **12.0** **Power of Engines** **60** **No. of Tiers of Beams** **One**

	Inches in Ship	Inches per Rule										
KEEL , depth and thickness	4 x 1 1/2	2 1/2										
STEM , moulding and thickness	4 x 1 1/2	2 1/2										
STERN-POST for Rudder do. do.	4 x 3 1/4	6 1/4										
" " for Propeller	4 x 3 1/4	6 1/4										
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	21	21	21	21	21	21	21	21	21	21	21
FRAMES , Angle Iron, for 2/3 length amidships	3	3	3	3	3	3	3	3	3	3	3	3
Do. for 1/2 at each end	3	3	3	3	3	3	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	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	13	13	13	13	13	13	13	13	13	13	13	13
" thickness at the ends of vessel	13	13	13	13	13	13	13	13	13	13	13	13
" depth at 2/3 the half-bdth. as per Rule	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4
" height extended at the Bilges	20	20	20	20	20	20	20	20	20	20	20	20
BEAMS , Upper, Spar, or Awning Deck } Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron } 4 2 1/2 6 4 2 1/2 6	4	2 1/2	6	4	2 1/2	6	4	2 1/2	6	4	2 1/2	6
Angle or double Angle Iron on Upper edge	21	21	21	21	21	21	21	21	21	21	21	21
Average space	21	21	21	21	21	21	21	21	21	21	21	21
BEAMS , Main, or Middle Deck } Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron } 6 6 6 6 6 6	6	6	6	6	6	6	6	6	6	6	6	6
Angle, or double Angle Iron, on Upper Edge	3 1/2	3	6	3 1/2	3	6	3 1/2	3	6	3 1/2	3	6
Average space	42	42	42	42	42	42	42	42	42	42	42	42
BEAMS , Lower Deck } Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron } 5 1/2 3 4 5 1/2 3 4	5 1/2	3	4	5 1/2	3	4	5 1/2	3	4	5 1/2	3	4
Angle or double Angle Iron on Upper Edge	42	42	42	42	42	42	42	42	42	42	42	42
Average space	42	42	42	42	42	42	42	42	42	42	42	42
BEAMS , Hold, or Orlop } Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron } 10 8 10 8 10 8	10	8	10	8	10	8	10	8	10	8	10	8
Angle or double Angle Iron on Upper Edge	7	8	6 1/2	8	7	8	6 1/2	8	7	8	6 1/2	8
Average space	7	8	6 1/2	8	7	8	6 1/2	8	7	8	6 1/2	8
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	10	8	10	8	10	8	10	8	10	8	10	8
" Rider Plate	7	8	6 1/2	8	7	8	6 1/2	8	7	8	6 1/2	8
" Bulb Plate to Intercostal Keelson	3	3	6	3	3	6	3	3	6	3	3	6
" Angle Irons	3	3	6	3	3	6	3	3	6	3	3	6
" Double Angle Iron Side Keelson	3	3	6	3	3	6	3	3	6	3	3	6
" Side Intercostal Plate	3	3	6	3	3	6	3	3	6	3	3	6
" do. Angle Irons	3	3	6	3	3	6	3	3	6	3	3	6
" Attached to outside plating with angle iron	3	3	6	3	3	6	3	3	6	3	3	6
LOWER DECK Angle Irons	3	3	6	3	3	6	3	3	6	3	3	6
" do. Bulb Iron	3	3	6	3	3	6	3	3	6	3	3	6
" do. Intercostal plates riveted to plating for length } 6 6 6 6 6 6	6	6	6	6	6	6	6	6	6	6	6	6
LOWER STRINGER Angle Irons	3	3	6	3	3	6	3	3	6	3	3	6
" do. Intercostal plates riveted to plating for length } 6 6 6 6 6 6	6	6	6	6	6	6	6	6	6	6	6	6
UPPER STRINGER Angle Irons	3	3	6	3	3	6	3	3	6	3	3	6
" do. Intercostal plates riveted to plating for length } 6 6 6 6 6 6	6	6	6	6	6	6	6	6	6	6	6	6

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 **1** length amidships.
Butts of Main Stringer Plate, treble riveted for **3/4** length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for **1** length.
 Breadth of laps of plating in double riveting **4 1/2** Breadth of laps of plating in single riveting **2 1/2**
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? **treble & double** No. of Breasthooks, **3** Crutches, **2** deep floor
 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, P. Stockton; Rev. bars Kirk Bros; All plates "Bolted" Vaughan & Co.**
 The above is a correct description.
 Surveyor's Signature, **James Chapman's Register**
 Owner's Signature, **Mac Swaine Lewis & Co.** 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 72.4 x 15 diam
Main " " " " 67.6 x 15 " "

NUMBER for EQUIPMENT	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprtd.	ANCHORS.		N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprtd.
								Bower Anchors	Stream Anchor					
	Fore Sails,	Chain	90	1	24 <i>low</i>	165 x 1	30 Oct. 84	1	4.1.14	9.11.2.7	7 1/4	29 Oct. 84		
	Fore Top Sails,	Iron Stream Chain	45	1	12 1/2	45 x 11	" " "	1	4.1.0	9.9.11.4	7 1/4	" " "		
	Fore Topmast Stay Sails,	or Steel Wire												
	Main Sails,	or Hempen Strm Cable												
	Main Top Sails,	Towline, Hemp.	75	1/2	7 1/2	75 x 7 1/2								
		or Steel Wire	90	5 1/2										
		Hawser	75	5		90 x 5 1/2								
		Warp	60	5										
		quality												

Standing and Running Rigging *line & 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? *Deck on Iron Comings* How secured in ordinary weather? *Screw bolts*
 What arrangements for deadlights in bad weather? *24 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 and fore and afters in all*
 What arrangement for shifting beams?
 Hatches, If strong and efficient? *yes solid.*

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

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 A 1*
 The amount of the Entry Fee£ *2* is received by me, *J. J.*
 Special£ *14*£ *13.1* 18*85*
 (to be sent as per margin). Certificate ...
 (Travelling Expenses, if any, £ ...).
 Committee's Minute
 Character assigned *100 A 1*
 FRIDAY 16 JAN 1885
 James Surpin
 Surveyor to Lloyd's Register of British and Foreign Shipping
 It is submitted that this vessel appears eligible to be classed 100 A 1 as recommended by Lloyd's Register
 1571/85