

IRON SHIP.

(Received at London Office, SAT 10 APRIL 1887)

No. 3312 Survey held at Belfast Date, First Survey 8th Nov. 1886 Last Survey 14th April 1887

On the Iron Screw Steamer "Kathleen"

TONNAGE under Tonnage Deck 296.14
 Ditto of Third, Spar, or Awning Deck. 11.48
 Ditto of Houses 8.18
 Ditto of Forecastle 20.68
 Gross Tonnage 336.48
 Less Crew Space 25.75
 Less Engine Room 198.33
 Register Tonnage as cut off Beam 112.40

ONE, OR TWO DECKED, THREE DECKED VESSEL,
 SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) 11.5
 Depth from upper part of Keel to top of Upper Deck Beams 13.0
 Girth of Half Midship Frame (as per Rule) 21.87
 1st Number 4637
 1st Number, if a 3-Decked Vessel deduct 7 feet 154.45
 Length 154.45
 2nd Number 7161
 Proportions— Breadths to Length 6.7
 Depths to Length—Upper Deck to Keel 11.8
 Main Deck ditto 11.8

Master Edward Russell 1887 April
 Built at Belfast
 When built 1886 & 7 Launched 3rd March 1887
 By whom built Workman Clark & Co
 Owners John Milligen
 Residence Belfast
 Port belonging to Belfast
 Destined Voyage Coasting
 If Surveyed while Building, Afloat, or in Dry Dock.
Specially Surveyed while building

LENGTH on deck as per Rule 154.5 BREADTH—Moulded 23.0 DEPTH top of Floors to Upper Deck Beams 11.11 Power of Engines 70 Horse. 70 No. of Decks with flat laid One No. of Tiers of Beams One

Dimensions of Ship per Register, length, 155.7 breadth, 23.2 depth, 11.8 to floors. 12 ft 7 in moulded.

	Inches in Ship.	Inches in Ship.	16ths in Ship.	Inches in Ship.	Inches in Ship.	16ths in Ship.
KEEL, depth and thickness	7 x 13	7 x 13		7 x 13	7 x 13	
STEM, moulding and thickness	7 x 13	7 x 13		7 x 13	7 x 13	
STERN-POST for Rudder do. do.	6 1/2 x 3 1/4	6 1/2 x 3 1/4		6 1/2 x 3 1/4	6 1/2 x 3 1/4	
" " for Propeller	6 1/2 x 3 1/4	6 1/2 x 3 1/4		6 1/2 x 3 1/4	6 1/2 x 3 1/4	
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	21		21	21	
FRAMES, Angle Iron, for 1/2 length amidships	3 x 3	3 x 3	5	3 x 3	3 x 3	6
Do. for 1/2 at each end	3 x 3	3 x 3	5	3 x 3	3 x 3	5
REVERSED FRAMES, Angle Iron	2 1/2	2 1/2	5	2 1/2	2 1/2	5
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	13	6	13	6	6	
" thickness at the ends of vessel	6 1/2	5		6 1/2	5	
" depth at 3/4 the half-bdth. as per Rule	6 1/2	26		6 1/2	26	
" height extended at the Bilges	26			26		
BEAMS, Upper, Spar, or Awning Deck	4 1/2	6	4 1/2	2 1/2	6	
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	Single angles	Single angles		Single angles	Single angles	
Single or double Angle Iron on Upper edge	21			21		
Average space						
BEAMS, Main, or Middle Deck						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single, or double Angle Iron, on Upper Edge						
Average space						
BEAMS, Lower Deck						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
BEAMS, Hold, or Orlop						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	10	8	10	8		
" Rider Plate	6 1/2	8	6 1/2	8		
" Bulb Plate to Intercostal Keelson						
" Angle Irons	6 1/2	3	6 1/2	3	6	
" Double Angle Iron Side Keelson	6 1/2	3	6 1/2	3	6	
" Side Intercostal Plate						
" do. Angle Irons						
" Attached to outside plating with angle iron	2 1/2	2 1/2	4	2 1/2	2 1/2	1
BILGE Angle Irons	3	3	6	3	3	6
" do. Bulb Iron	6	6	6	6	6	6
" do. Intercostal plates riveted to plating for length						
BILGE STRINGER Angle Irons	3	3	6	3	3	6
Bulb Intercostal plates riveted to plating for length	6	6	6	6	6	6
SIDE STRINGER Angle Irons	3	3	6	3	3	6
The FRAMES extend in one length from middle line to gunwale						
The 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 5 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 all Strakes at Bilge for 3 length, treble riveted with Butt Straps 1/2 thicker than the plates they connect.						
" Edges from Bilge to Main Sheerstrake, worked clencher, double 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.						
" Butts of Main Sheerstrake, treble riveted for 3 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.						
" Butts of Main Stringer Plate, treble riveted for 3 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.						
" Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 1/2						
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble & double No. of Breasthooks, 4 Crutches, 3						
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best Ship quality						
Manufacturer's name or trade mark, James & New James - the Waverley Iron Co.; beams and keelsons - B. Colville & Sons						
The above is a correct description. Stringers, floors, decks, shell, tanks, and bulkheads - Stockton Mill. Iron Co.						
Builder's Signature, J. Workman						
Surveyor's Signature, James Claxton						
Surveyor to Lloyd's Register of British and Foreign Shipping.						

State clearly where plating is of alternate thicknesses - as distinguished from distinguished thickness at ends of vessel.

* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

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? no

Masts, Bowsprit, Yards, &c., are sufficient & 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

Fore and aft Schooner as auxiliary
to steam propulsion fore mast 42 ft. and main mast 67 ft. each 14"
dia. of pitch pine, pole masts. Fore boom 28 ft x 9" x 7 1/2" dia. main boom
30 ft x 9" x 7 1/2" dia of Spruce.

NUMBER & LETTER for EQUIPMENT	CABLES, &c.	Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
SAILS.	Chain 196 15" 22 3/4 tons 165 x 116	196 15" 22 3/4 tons 165 x 116	196 15" 22 3/4 tons 165 x 116	196 15" 22 3/4 tons 165 x 116	Bower Anchors	1	10-0-21 (1-3-21)	12-4-1-14	8 1/2	10201
Fore Sails,	Iron Stream Chain 60 3 10 1/2" 60 x 46	60 3 10 1/2" 60 x 46	60 3 10 1/2" 60 x 46	60 3 10 1/2" 60 x 46	Stream Anchor	1	10-0-14 (2-0-0)	12-2-0-21	8 1/2	10199
Fore Top Sails,	or Steel Wire ..					1	8-2-21 (1-2-14)	10-17-2-0	7 1/4	10203
Fore Topmast Stay Sails,	or Hempen Strm Cable ..									
Main Sails,	Towline, Hemp. 75 7 1/2 75 x 7 1/2	75 7 1/2 75 x 7 1/2	75 7 1/2 75 x 7 1/2	75 7 1/2 75 x 7 1/2						
Main Top Sails, and	or Steel Wire ..									
	Hawser 90 5 1/2 90 x 5 1/2	90 5 1/2 90 x 5 1/2	90 5 1/2 90 x 5 1/2	90 5 1/2 90 x 5 1/2						
	Warp 120 4 1/2	120 4 1/2	120 4 1/2	120 4 1/2						
	quality <u>good</u>									

Standing and Running Rigging steel wire & hemp sufficient in size and good in quality. She has two Long Boats and 19-0 x 5-9 x 2-5 and 15-0 x 5-0 x 2-0
The Windlass is Rabat & good Capstan none and Rudder good Pumps good
Engine Room Skylights.—How constructed? Solid teak built upon How secured in ordinary weather? With quadrants & bolts
What arrangements for deadlights in bad weather? Solid teak hatches hatches How are hatches secured? tarpsaulin & cleats Height above deck? 10 ft.
Coal Bunker Openings.—How constructed? 36" above bridge deck How are hatches secured? tarpsaulin & cleats Height above deck? 10 ft.
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? three scuppers and four clearing
ports fitted with hinged doors two 14" x 20" & two 17" x 23" on each side of vessel
Cargo Hatchways.—How formed? 7/16" iron coamings attached to iron deck with 3 1/2 x 3 1/2 x 7/16" angle irons
State size Main Hatch 24' 6" x 13' 0" height 33" Forehatch Quarterhatch 21' 0" x 12' 0" x 39
If of extraordinary size, state how framed and secured? Two dup portable iron plates 7" thick full depth of coaming
What arrangement for shifting beams? stiffened at top & bottom in each hatch and one fore and
Hatches, If strong and efficient? Solid 3" V.P. after

Order for Special Survey No. 195 1st. On the several parts of the frame, when in place, and before the plating was wrought } November 8th 30, Dec. 2, 7, 14, 17, 20
Date Nov. 10th 1886 2nd. On the plating during the process of riveting } 31st 1886, Jan. 11-11-11, 12, 18, 21, 24,
Order for Ordinary Survey No. 195 3rd. When the beams were in and fastened, } 26, 27, Feb. 1, 4, 6, 11, 14, 18, 22, 25
Date Nov. 10th 1886 4th. When the ship was complete, and before the } 28, March 1, 2, 3, 31 April, 14
No. 45 in builder's yard. 5th. After the ship was launched and equipped }
State dates of letters respecting this case 25th October, 20th Dec. 1886 & 5th Jan. 1887.

General Remarks (State quality of workmanship, &c.) This vessel has been built in accordance with, or in excess of the approved plans, viz; midship section, propulsion arrangement; the Secretary's letters of above dates & the Rules of the Society for Special Survey.

The vessel generally is in excess of Rules & principally in the number of Hilsons, the riveting of shell and the equipment.
A Forecastle 26 ft 3 in. long, a Bridge 40 ft. long closed in at fore end with iron bulkhead having one door, and a Raised quarter deck 19 ft 9 in. long 4 ft 3 in. high. are fitted. There is a water ballast tank forward 12' 3" long x 8 ft. deep Capacity 33 tons & an after peak tank of 33 tons Capacity, both of which have been pressed as per Rules.

The material and workmanship throughout are good and satisfactory.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecandle, or raised quarter deck. (If double bottom, state particulars on separate form.)
How are the surfaces preserved from oxidation? Inside Portland Cement & paint Outside paint

I am of opinion this Vessel should be Classed 100A1

The amount of the Entry Fee £ 2 is received by me, James Chaslow
Special £ 16 14. 4. 1887
(to be sent as per margin). Certificate ...

Committee's Minute FRIDAY 22 APRIL 1887
Character assigned 100A1

100A1
L & F P 1 St. Iron
+ MCB
TRW
Lloyd's Register Foundation