

# Steel and IRON SHIP.

3473

No. 3423 Survey held at *Belfast* Date, First Survey *July 27<sup>th</sup> 1886* Last Survey *May 11<sup>th</sup> 1888*On the *Screw Steamer Lucia*

TONNAGE under Tonnage Deck *2983.71*  
Ditto of Third, Spar, or Awning Deck *14.98*  
Ditto of Poop, or Raised Qr. Dk. *59.67*  
Ditto of Houses on Deck *118.08*  
Ditto of Forecastle *43.30*  
Gross Tonnage *3222.74*  
Less Crew Space *39.39*  
Less Engine Room *1081.28*  
Register Tonnage as cut on Beam *2102.07*

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

Half Breadth (moulded) *20.34*  
Depth from upper part of Keel to top of Upper Deck Beams *30.16*  
Girth of Half Midship Frame (as per Rule) *46.41*  
1st Number *96.94*  
1st Number, if a 3-Decked Vessel deduct 7 feet *7*  
Length *89.94*  
2nd Number *343.16*  
3rd Number *30863*  
Proportions—Breadths to Length *8.42*  
Depths to Length—Upper Deck to Keel *11.34*  
Main Deck ditto *15.45*

Master *Chas. Hosseson 1883-88*  
Built at *Belfast*  
When built *1886-7-8* Launched *Nov-5-88*  
By whom built *Harland & Wolff*  
Owners *City of Liverpool S. S. Co.*  
Residence *Liverpool*  
Port belonging to *Liverpool*  
Destined Voyage *Bombay via Liverpool*  
If Surveyed while Building, Afloat, or in Dry Dock.  
*15.45 Specially surveyed while Building*

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	343	2	Moulded	40	9	top of Floors to Upper Deck Beams	28	0 1/2	Engines	320	Two	Two
Do. do. Main Deck Beams							30	0 1/2				
Dimensions of Ship per Register, length, 346.5 breadth, 40.95 depth, 26.4 moulded depth 29.6												
KEEL, depth and thickness	Side bars		9 x 1 7/8		9 x 1 7/8		9 x 1 7/8					
STEM, moulding and thickness			9 x 3 3/8		9 x 3 3/8		9 x 3 3/8					
STERN-POST for Rudder do. do.			11 x 6 1/2		11 x 6 1/2		11 x 6 1/2					
" " for Propeller			11 x 6 1/2		11 x 6 1/2		11 x 6 1/2					
Distance of Frames from moulding edge to moulding edge, all fore and aft	24		24		24		24					
FRAMES, Angle Iron, for 1/2 length amidships	5 1/2 x 3 1/2		5 1/2 x 3 1/2		5 1/2 x 3 1/2		5 1/2 x 3 1/2					
Do. for 1/2 at each end	5 1/2 x 3 1/2		5 1/2 x 3 1/2		5 1/2 x 3 1/2		5 1/2 x 3 1/2					
REVERSED FRAMES, Angle Iron	5 1/2 x 3 1/2		5 1/2 x 3 1/2		5 1/2 x 3 1/2		5 1/2 x 3 1/2					
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	42		42		42		42					
" thickness at the ends of vessel	42		42		42		42					
" depth at 1/2 the half b'dth. as per Rule	Under 28 B. 9		Under 28 B. 9		Under 28 B. 9		Under 28 B. 9					
" height extended at the Bilges	69		69		69		69					
S, Upper, Spar, or Awning Deck	8 1/2 x 3 1/2		8 1/2 x 3 1/2		8 1/2 x 3 1/2		8 1/2 x 3 1/2					
or d'ble Ang. Iron, Plate or Tee Bulb Iron	10 at hatches		10 at hatches		10 at hatches		10 at hatches					
or double Angle Iron on Upper edge	40		40		40		40					
age space	40		40		40		40					
IS, Main, or Middle Deck	10 x 3 1/2		10 x 3 1/2		10 x 3 1/2		10 x 3 1/2					
or d'ble Ang. Iron, Plate or Tee Bulb Iron	Steel		Steel		Steel		Steel					
or double Angle Iron, on Upper Edge	40		40		40		40					
age space	40		40		40		40					
IS, Lower Deck	8 1/2 x 3 1/2		8 1/2 x 3 1/2		8 1/2 x 3 1/2		8 1/2 x 3 1/2					
or d'ble Ang. Iron, Plate or Tee Bulb Iron	28 B. 9		28 B. 9		28 B. 9		28 B. 9					
or double Angle Iron on Upper Edge	Compensated for by deep		Compensated for by deep		Compensated for by deep		Compensated for by deep					
age space	As per Section		As per Section		As per Section		As per Section					
IS, Hold, or Orlop	8 1/2 x 3 1/2		8 1/2 x 3 1/2		8 1/2 x 3 1/2		8 1/2 x 3 1/2					
or d'ble Ang. Iron, Plate or Tee Bulb Iron	Boy Stringer		Boy Stringer		Boy Stringer		Boy Stringer					
or double Angle Iron on Upper Edge	40		40		40		40					
age space	40		40		40		40					
LSONS Centre line, single or double plate, box, or Intercoastal Plates	51		51		51		51					
Rider Plate	9		9		9		9					
Bulb Plate to Intercoastal Keelson	4		4		4		4					
Angle Irons	4		4		4		4					
Double Angle Iron Side Keelson	4		4		4		4					
Side Intercoastal Plate	3 1/2		3 1/2		3 1/2		3 1/2					
do. Angle Irons	3 1/2		3 1/2		3 1/2		3 1/2					
Attached to outside plating with angle	3 1/2		3 1/2		3 1/2		3 1/2					
GE Angle Irons	4		4		4		4					
do. Bulb Iron	4		4		4		4					
do. Intercoastal plates riveted to plating for length	4		4		4		4					
BILGE STRINGER Angle Irons	6 1/2		6 1/2		6 1/2		6 1/2					
Intercoastal plates riveted to plating for length	3 1/2		3 1/2		3 1/2		3 1/2					
IDE STRINGER Angle Irons	6 1/2		6 1/2		6 1/2		6 1/2					
he FRAMES extend in one length from	flange plate		flange plate		flange plate		flange plate					
he REVERSED ANGLE IRONS on floors and frames extend	from middle line to		from middle line to		from middle line to		from middle line to					
EELSONS. Are the various lengths of Plates and Angle Irons properly connected?	Yes		Yes		Yes		Yes					
LATING. Garboard, double riveted to Keel, with rivets	1 1/2		1 1/2		1 1/2		1 1/2					
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets	3 3/8		3 3/8		3 3/8		3 3/8					
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets	3		3		3		3					
Butts of All Strakes at Bilge for length, treble riveted with Butt Straps	3/20		3/20		3/20		3/20					
Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets	3 3/8		3 3/8		3 3/8		3 3/8					
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets	3		3		3		3					
Edges of Main Sheerstrake, double or single riveted.	Upper Sheerstrake, double or single riveted.		Upper Sheerstrake, double or single riveted.		Upper Sheerstrake, double or single riveted.		Upper Sheerstrake, double or single riveted.					
Butts of Main Stringer Plate, treble riveted for length amidships.	Butts of Upper or Spar Stringer Plate, treble riveted for half length.		Butts of Upper or Spar Stringer Plate, treble riveted for half length.		Butts of Upper or Spar Stringer Plate, treble riveted for half length.		Butts of Upper or Spar Stringer Plate, treble riveted for half length.					
Breadth of laps of plating in double riveting	8 1/4		8 1/4		8 1/4		8 1/4					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?	Double & single		Double & single		Double & single		Double & single					
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.?	Best		Best		Best		Best					
Manufacturer's name or trade mark.	W. B. Banks, Frames & deck plating		W. B. Banks, Frames & deck plating		W. B. Banks, Frames & deck plating		W. B. Banks, Frames & deck plating					
The above is a correct description.	and W. Cumberland & Co.		and W. Cumberland & Co.		and W. Cumberland & Co.		and W. Cumberland & Co.					



Workmanship. Are the butts of plating planed or otherwise fitted? *Hammered.*  
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 *all* 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 as Auxiliary to Steam power*

*Fore and main pole masts of steel 111.6 and 105.1 x 24 and 25 diam. respectively. Constructed with three plates in the round 10 to 32, and 3 iron angles 3 x 3 x 5/8; doubling plates fitted at the partners, and at the heels; and the plates tested at the Steel works*

NUMBER & LETTER for SAILS.	EQUIPMENT	CABLES, &c.	Fathoms	Inches	Test per Certificate	Inches per Rule	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS.	N°.	Weight. Ex. Stock.	Test per Certificate	Wght req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
Fore Sails,	Chain	1492	2 1/2	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Bower	1	40.0.20	35.18.30	40	12 Oct. 87
Fore Top Sails,	Iron Stream Chain	1202	2 1/2	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
Fore Topmast Stay Sails,	or Steel Wire	120	4 1/2	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
Main Sails,	or Hempen Strm	45	4	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
Main Top Sails, and	Cable	45	4	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
	Towline, Hemp	90	10	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
	or Steel Wire	90	10	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
	Hawser	90	10	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
	Warp	3 x 75	6	46.10.0	300 x 2 1/2	2 1/2	Oct. 87	Anchor	1	34.3.11	34.8.0.0	14	12 - " - "
	quality	good						Anchor	1	34.3.11	34.8.0.0	14	12 - " - "

Standing and Running Rigging *Wire & hemp* sufficient in size and *good* in quality. She has *Two* Life Boats and *four* others.  
The Windlass is *Potent and good* Capstan *good* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *of Iron in Cornings* How secured in ordinary weather? *with screw bolts & nut*  
What arrangements for deadlights in bad weather? *Solid top with bulls eyes* Height above deck? *10 inches*

Coal Bunker Openings. How constructed? *plates & angles* How are lids secured? *with hatch bars*  
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *2 Scuppers, 5 freeing ports & 2 spring pipes forward, and 5 Scuppers, 4 freeing ports and 2 spring pipes abaft the Bridge each*

Cargo Hatchways. How formed? *of plates and angles, Cornings 30 inches above deck*  
State size Main Hatch *26.0 x 13.0* Forehatch *19.0 x 11.0 & 3.0 x 6.0* Quarterhatches *19.0 x 11.0 and 15.0 x 10.0*

If of extraordinary size, state how framed and secured? *One deep web plate in each of 2 & 4 hatchways, 2 deep each plate*  
What arrangement for shifting beams? *in Main Hatch, a shifting beam in After hatch, and fore & afters in a*

Hatches, If strong and efficient? *yes, solid 3'*

Order for Special Survey No. *191* Date *June 26 1886*  
Order for Ordinary Survey No. *190* Date *June 26 1886*  
No. *190* in builder's yard.  
State dates of letters respecting this case *Nov. 19. 2 Dec. 14. 1885, and May 6. and June 23. 1886.*

General Remarks (State quality of workmanship, &c.) *This steamer is a duplicate of the "Ormiston", "Helen" and "Minnesota", Belfast Reports Nos 3266, 3307 and 3377 respectively, she has been built in accordance with the approved tracing of Midship Section forwarded on the 11th Inst. and the accompanying plan of pumping arrangement; in compliance with the Secretary's letters dated as above, and the Rules of the Committee's Circulars on steel have been adhered to. She has a Forecastle 40 feet long, partially enclosed, a Bridge 91 feet long, covering the Engines & Boilers, on the top of which is fitted a Chimney room and the Engine Skylight, and a poop 33 feet long. She has a double bottom constructed on the Cellular system 264 feet long, with water Capacity for 545 tons, and an after peak tank with water capacity for 40 tons, tested as required by the Rules. 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 poop, bridge, fore-castle, 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 Steel and Iron, 2 Dks (Iron) 3 Dk Rule*  
The amount of the Entry Fee *£ 5 : : : is received by me, J.D.*  
Special *£ 105 : 11 : 6 14. 5. 1886*

(to be sent as per margin) Certificate *Gratis*  
(Travelling Expenses, if any, £ *---*)  
Committee's Minute  
Character assigned *100 A 1 Steel*  
*+ dmc 5/88*  
*La acp*

FRIDAY 18 MAY 1888  
*2 Dks Iron 3 Dk Rule*  
*all DB*  
James Curpin  
Surveyor to Lloyd's Register of British and Foreign Ships  
It is submitted that the vessel appears eligible to be classed as 100 A 1 Steel as recommended by the Rules.  
Lloyd's Register Foundation