

IRON SHIP.

(Received at London Office) 20 JUNE 1894

No. 8721 Survey held at Greenock Date, First Survey 13th Sept. 1883 Last Survey 25th June 1884 1884On the Ship 4 masts "Falls of Earn" (46 visits)

TONNAGE under Tonnage Deck	2222.50	ONE, OR TWO DECKED, THREE DECKED VESSEL,
Ditto of Third, Spar, or Awning Deck.		SPAR, OR AWNING DECKED VESSEL.
Ditto of Poop, or Raised Or. Bk.	82.07	Half Breadth (moulded) 20.9
Ditto of Houses on Deck	29.26	Depth from upper part of Keel to top of Upper Deck Beams 26.85
Ditto of Forecastle	51.97	Girth of Half Midship Frame (as per Rule) .. . 42.40
Gross Tonnage	2385.80	1st Number 90.15
Less Crew Space	93.74	1st Number, if a 3-Decked Vessel .. deduct 7 feet
Less Engine Room		Length 286.25
Register Tonnage as cut on Beam	2292.06	2nd Number 25.805.4
		Proportions— Breadths to Length .. . 6.8
		Depths to Length—Upper Deck to Keel .. . 10.6
		Main Deck ditto

Master Nielson
Built at Greenock
When built 1884 Launched 30 May 1884
By whom built Russell & Co.
Owners Wright, Breckenridge & Co.
Residence Glasgow
Port belonging to Glasgow
Destined Voyage Calcutta.
Surveyed while Building, Afloat, or in Dry Dock.

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	top of Floors to Upper	Feet.	Inches.	Power of	Horse.	Nº. of Decks with flat laid
on deck as	286	3	Moulded...	42	0	Deck Beams	24	8	Engines ...	✓		2
per Rule ...						Do. do. Main Deck Beams						Nº. of Tiers of Beams 3
Dimensions of Ship per Register, length, 302.6 breadth, 42.1 depth, 24.5												
KEEL, depth and thickness	Inches in Ship.			Inches per Rule.								
STEM, moulding and thickness...	10 x 2 3/4			10 x 2 3/4								
STERN-POST for Rudder do. do.	10 x 2 3/4			10 x 2 3/4								
" " for Propeller	10 x 2 3/4			10 x 2 3/4								
Distance of Frames from moulding edge to	24			24								
moulding edge, all fore and aft	24			24								
FRAMES, Angle Iron, for 3/4 length amidships	Inches.	Inches.	16ths.	Inches.	Inches.	16ths.						
Do. for 1/2 at each end	5 1/2	3 1/2	8	5 1/2	3 1/2	8						
REVERSED FRAMES, Angle Iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8						
FLOORS, depth and thickness of Floor Plate	26	10	26	10	26	10						
at mid line for half length amidships												
thickness at the ends of vessel			8			8						
depth at 3/4 the half-bdth. as per Rule	13		13									
height extended at the Bilges...	52		52									
BEAMS, Upper, Spar, or Awning Deck	10	10	10	10	10	10						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2	7	3 1/2	3 1/2	7						
Single or double Angle Iron on Upper edge	48		48									
Average space...												
BEAMS, Main, or Middle Deck	10	10	10	10	10	10						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2	7	3 1/2	3 1/2	7						
Single or double Angle Iron on Upper Edge	48		48									
Average space...												
BEAMS, Lower Deck	10	10	10	10	10	10						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2	7	3 1/2	3 1/2	7						
Single or double Angle Iron on Upper Edge	48		48									
Average space...												
BEAMS, Hold, or Outlet	10	10	10	10	10	10						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2	7	3 1/2	3 1/2	7						
Single or double Angle Iron on Upper Edge	48		48									
Average space...												
KEELSONS Centre line, single or double plate,	19	13	19	13	19	13						
box, or Intercostal, Plates	13	13	13	13	13	13						
Rider Plate	15	13	15	13	15	13						
Bulb Plate to Intercostal Keelson	6	4	9	6	4	9						
Angle Irons	6	4	9	6	4	9						
Double Angle Iron Side Keelson	6	4	9	6	4	9						
Side Intercostal Plate	9		9									
do. Angle Irons	3 1/2	3 1/2	8	3 1/2	3 1/2	8						
Attached to outside plating with angle iron	3 1/2	3 1/2	8	3 1/2	3 1/2	8						
BILGE Angle Irons	6	4	9	6	4	9						
do. Bulb Iron	6	4	9	6	4	9						
do. Intercostal plates riveted to												
plating for length												
BILGE STRINGER Angle Irons	6	4	9	6	4	9						
Intercostal plates riveted to plating for												
length												
SIDE STRINGER Angle Irons	6	4	9	6	4	9						

Moulded depth = 26-0 3/4	Inches.	16ths.	Inches.	16ths.
Flat Keel Plates, breadth and thickness	36	12	36	12
PLATES in Garboard Strakes, br'dth & thickness	11		11	
From Garboard to upper part of Bilges...	11		11	
Of d'bling at Bilge, increased thickness,	1 1/2		1 1/2	
and length applied 3 Strake	11		11	
From up. prt of Bilge to l.r. edge of Sh'rstrake...	40	13	40	13
Main Sheerstrake, breadth and thickness...	12 1/2	14		
Of d'bling at Sh'stk. & lng. applied	19 x 4 1/2	12-13		
From M'n. to Upr. or Spar Dk. Sh'rstrake...	16 1/4 x 16			
Upr. or Spar Dk Sh'rstrake, br'dth & thick'ns...	11 1/4 x 11 1/2			
Butt Straps to outside plating, breadth & thickness	9 3/4 x 10 9			
Lengths of Plating 6 frame space	41	10	41	10
Shifts of Plating, and Stringers 2 x 3 do				
Gunwale Plate on ends of Awning Spar, or				
Upper Deck Beams, breadth and thickness...	6 x 4 x 9 1/2		6 x 4 x 9	
Angle Iron on ditto				
Tie Plates fore and aft, outside Hatchways				
Diagonal Tie Plates on Beams No. of Pairs 3				
Flat of Up., Spar, or Awning Dk. * 7/16. 9/16 iron deck 3/2 dk over				
How fastened to Beams Riveted				
Stringer Plate on ends of Main or Middle Deck	41	9	41	9
Beams, breadth and thickness				
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 2	4 x 4 x 9 1/2		4 x 4 x 9 1/2	
Tie Plates, outside Hatchways	16	10	16	10
Diagonal Tie Plates on Beams, No. of pairs 6	16	10	16	10
Flat of Middle Deck* do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or	24	8	24	8
Onop Beams				
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 2	4 x 4 x 8 1/2		4 x 4 x 8 1/2	
Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck*				
Ceiling betwixt Decks, thickness and material	2		2	
in hold do. do. P.P.	2 1/2		2 1/2	
Main piece of Rudder, diameter at head	7 1/4		7 1/4	
do. at heel	4		4	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 1 No. per Rule				
Thickness of 7 1/2				
Height up 10 1/2 upper deck				
How secured to sides of ship Double frame angle iron				
Size of Vertical Angle Irons 3 1/2 x 3 1/2 3/4 and distance apart 30 ins.				
Are the outside Plates doubled two spaces of Frames in length?	Yes			

The FRAMES extend in one length from middle line to upper deck Riveted through plates with 7/8 in. Rivets, about 7 apart.The REVERSED ANGLE IRONS on floors and frames extend from middle line to upper deck stringer and to on every frame alternatelyKEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? YesPLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 5/8 ins. from centre to centre." Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 7/8 in. diameter, averaging 3 3/7 ins. from centre to centre." Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre." Butts of 4 Strakes at Bilge for 1/2 length? treble riveted with Butt Straps 1/6 thicker than the plates they connect." Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 7/8 in. diameter, averaging 3 3/7 ins. from cr. to cr." Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 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.

" Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships." Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length." Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting 5 No. of Breasthooks, 5 Crutches, 5Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted ✓What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good.Manufacturer's name or trade mark, Angle Irons, Bulb, Middleboro' & Plates—Consell.

The above is a correct description.

Builder's Signature, Russell Surveyor's Signature, S. Hearle

Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed and fitted*
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? *A few only at the butts*

Masts, Bowsprit, Yards, &c., are *Iron & Wood* 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 Mast & main Mast, each 90'-6" long 32 x 9/16, 23 x 7/16, 21 x 9/16 } Four plates & 4 angles, each 2 x 3 x 7/16 in
Reef Mast 85'-3" 30 x 9/16, 22 x 9/16, 19 x 9/16 } the round in 3 masts & 3 plates & 3 angles
Bowsprit 48'-0" in one extension length 49'-0" 30 x 9/16 & 19 x 9/16 (capt) } 3 1/2 x 3 x 7/16 in the faying mast. Edges double
three angles 4 x 3 x 7/16 & a diaphragm plate

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W't reg'd per Rule.	Machine where Tested & Suprntd.
SAILS.		CABLES, &c.										
N ^o .		Chain	135	2 3/4	76 1/2	107 1/2	Bower Anchors					
Fore Sails,		Iron Stream Chain	135	2 3/4	do	do	17631					
Fore Top Sails,		or Steel Wire	100	1 3/4	34	15-0-0	17824					
Fore Topmast Stay Sails,		or Hempen Strm Cable	15	1 1/4	39	18-0-0	17825					
Main Sails,		Towline, Hemp.	80	1 1/4	39	18-0-0	Total 14: 3: 13					
Main Top Sails,		or Steel Wire	90	1 3/4	34	15-0-0	Stream Anchor					
and other quality food		Hawser	90	1 1/4	34	15-0-0	Kedge					
		Warp	90	1 3/4	34	15-0-0	2nd Kedge					

Standing and Running Rigging *Illie Manila* sufficient in size and *food* in quality. She has *two* *long* Boats and *3* others.

The Windlass is *Iron* *food* Capstan *food* and Rudder *food* Pumps *food*

Engine Room Skylights. How constructed? *How secured in ordinary weather?*

Coal Bunker Openings. How constructed? *How are lids secured?* Height above deck? *Five Scuppers & 2 in ports each side*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Three ports 22 x 24 & three 28 x 9*

Cargo Hatchways. How formed? *Coaming 9/16 thick and 29 1/2 above deck*

State size Main Hatch *16 x 12 & 16 x 12* Fore hatch *4 x 4* Quarter hatch *12 x 8*

If of extraordinary size, state how framed and secured? *Ordinary size*

What arrangement for shifting beams? *A deep web plate & 3 fore and aft in both main & fore & aft in 2nd*

Hatches, If strong and efficient? *Yes 4 solid*

Order for Special Survey No. *1188* Date *11th June 1884*
Order for Ordinary Survey No. *1189* Date *11th June 1884*
No. *84* in builder's yard
State dates of letters respecting this case *12/6/83 19/6/83 14/7/83 2/8/84*

General Remarks (State quality of workmanship, &c.)

This is an iron four masted sailing ship, built in accordance with the approved plans attached hereto and with the rules generally. The deck erections are securely constructed and stiffened and ample provision made against parting. The workmanship is good. A Freeboard of 5ft 8ins in salt water & 3ft 3ins in fresh water has been marked on the side in accordance with Committee Circular 471 and Secretary's letter of the 26th June 84

Popo. - 31ft Forecastle 28.5

State if one, two, or three decked vessel, or if open, or covering decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form)

How are the surfaces preserved from oxidation? Inside *Paint & Cement* Outside *Paint*

I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee *5: 0: 0* is received by me, *J. H. P. P. P.*

Special *84: 17: 0* 27/6/1884

(to be sent as per margin). Certificate ... *Gravis*

(Travelling Expenses, if any, £ ...)

Committee's Minute *100 A 1* Character assigned *100 A 1*