

Steel IRON SHIP.

(Received at London Office, 10 MAY 1888)

No. 3422 Survey held at Belfast Date, First Survey Feb. 12th 87 Last Survey May 3rd 1888

the Screw Steamer "Titanic"

NAGE under Tonnage Deck 1251.62
of Third, Spar, or Awning Deck. Br. 202.09
Ditto of Poop, or Raised Qr. Dk. 83.59
Ditto of Houses on Deck 3.82
Ditto of Forecastle Hatchways 43.63
Gross Tonnage 1608.21
Less Crew Space 1580.66
Less Engine Room 514.63
Register Tonnage as cut on Beam 1016.03

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

Half Breadth (moulded) 17.5
Depth from upper part of Keel to top of Upper Deck Beams 20.3
Girth of Half Midship Frame (as per Rule) 34.1
1st Number 71.9
1st Number, if a 3-Decked Vessel deduct 7 feet -
Length 272.5
2nd Number 20024.1
Proportions— Breadths to Length 8.
Depths to Length— Upper Deck to Keel 13.2
Main Deck ditto 1 per rule

Master E. S. Nelson 1884 - 1888
Built at Belfast
When built 1887 - 88 Launched Mar. 3rd 88
By whom built MacLachlan Lewis & Co.
Owners Clark & Birnie
Residence Belfast Glasgow
Port belonging to Belfast
Destined Voyage Baltic via Glasgow
If Surveyed while Building, Afloat, or in Dry Dock.
Specially Surveyed while Building.

LENGTH on deck as per Rule 270 6 BREADTH Moulded 35 DEPTH top of Floors to Upper Deck Beams 16 4 Power of Engines 260 Horse. N° of Decks with flat laid One N° of Tiers of Beams Two

Dimensions of Ship per Register, length, 280 breadth, 35.4 depth, 16.35, moulded depth 19.4

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness (Side bars).	9 1/2 x 1	9 1/2 x 1
STEM, moulding and thickness...	9 x 2 1/2	9 x 2 1/2
STERN-POST for Rudder do. do.	9 x 5 1/2	9 x 5 1/2
" " for Propeller	9 x 5 1/2	9 x 5 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24
FRAMES, Angle Iron, for 1/2 length amidships	4 1/2 3 0	4 1/2 3 0
Do. for 1/2 at each end	4 1/2 3 4	4 1/2 3 4
REVERSED FRAMES, Angle Iron Steel	3 3 4	3 3 4
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	4 1/2 16	3 1/2 16
thickness at the ends of vessel	under 1/16	under 1/16
depth at 1/2 the half-bdth. as per Rule	79	79
height extended at the Bilges	79	79
BEAMS, Upper, Spar, or Awning Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	6 3 0	6 3 0
or double Angle Iron on Upper edge	Bulb angle	Bulb angle
average space	24	24
MS, Main, or Middle Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron		
or double Angle Iron, on Upper Edge		
average space		
MS, Lower Deck Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron		
or double Angle Iron on Upper Edge		
average space		
MS, Hold, or Orlop Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron	9 1/2 bulb 9	9 1/2 bulb 9
or double Angle Iron on Upper Edge	4 4 0	4 4 0
average space	As profile	As profile
ELSONS Centre line, single or double plate, box, or intercostal, Plates	5 1/2 9	4 0 9
Rider Plate		
Bulb Plate to Intercostal Keelson		
Angle Iron	4 4 9	4 4 9
Double Angle Iron Side Keelson		
Side Intercostal Plate or Girders	3 3 4	3 3 4
do. Angle Iron Steel	3 3 4	3 3 4
Attached to outside plating with angle iron	3 1/2 3 1/2 4	3 1/2 3 1/2 4
ANGLE Angle Iron to Flange plate	3 1/2 3 1/2 4	3 1/2 3 1/2 4
do. Bulb Iron		
do. Intercostal plates riveted to plating for full length		
STRONGER Angle Iron Steel	5 1/2 4 9	5 1/2 4 9
Intercostal plates riveted to plating for 1/2 length		
STRONGER Angle Iron Steel	5 1/2 4 10	5 1/2 4 9

Flat Keel Plates, breadth and thickness 45 12 36 12
PLATES in Garboard Strakes, br'dth & thickness 10-11-12 10, 11, 12
From Garboard to upper part of Bilges... 1/20
Of d'bling at Bilge, or increased thickness, and length applied half
From up. prt of Bilge to l.r. edge of Sh'rstrake... 11-12 1/12 10-11
Main Sheerstrake, breadth and thickness... 41 15 40 13
Of d'bling at Sh'stk. & lng. applied 3/8
From M'n. to Upr. or Spar Dk. Sh'rstrake... 11 10
Up. or Spar Dk Sh'rstrake, br'dth & thicken'ss...
Butt Straps to outside plating, breadth & thickness 19-14 1/16 12 19-9 1/16 16-10
Lengths of Plating 8 spaces 5 spaces
Shifts of Plating, and Stringers 2 " 2 "
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... 40 12 40 11
Angle Iron on ditto 5 1/2 x 5 1/2 x 10 5 1/2 x 4 x 9
Tie Plates fore and aft, outside Hatchways
Diagonal Tie Plates on Beams No. of Pairs
Flat of Up., Spar, or Awning Dk.* Steel 6 Steel 6
How fastened to Beams 1/4 way of 7
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Tie Plates, outside Hatchways
Diagonal Tie Plates on Beams, No. of pairs
Flat of Middle Deck* do.
How fastened to Beams
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 38 9 38 9
Is the Stringer Plate attached to the outside plating? 4 1/2 As required
Angle Irons on ditto, No. 4 2 x 4 x 4 x 9 4 x 4 x 9
Stringer or Tie Plates, outside Hatchways 2 x 5 1/2 x 3 1/2 x 7 3 1/2 x 3 1/2 x 7
Flat of Lower Deck*
Ceiling betwixt Decks, thickness and material 9 x 2 1/2 R.P. pattern
in hold do. 2 1/2 R.P. 2 1/2
Main piece of Rudder, diameter at head 7 1/2 7 1/2
do. at heel 3 1/2 3 1/2
Can the Rudder be unshipped afloat? Yes
Bulkheads No. 4 No. per Rule 4 6
Thickness of 20
Height up Upper deck
How secured to sides of ship between double frames Steel 4 1/2 x 3 x 20 and distance apart 30 ins.
Size of Vertical Angle Iron 4 1/2 x 3 x 20 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? Yes
Riveted through plates with 1/2 in. Rivets, about 7 apart.
Flange plate to Gunwale
Flange plate to Lower Deck Stringer, and to Gunwale alternately.
and all 1/2 in. rivets to increase deck strength
And butts properly shifted? Yes

FRAMES extend in one length from Flange plate to Gunwale
REVERSED ANGLE IRONS on floors and frames extend from middle line to Gunwale
ELSONS. Are the various lengths of Plates and Angles properly connected? Yes
TING. Garboard, double riveted to Keel, with rivets 1/2 in. diameter, averaging 4 1/2 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1/2 in. diameter, averaging 3 3/4 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/2 in. diameter averaging 3 3/4 ins. from centre to centre.
Butts of All Strakes at Bilge for entire length, treble riveted with Butt Straps 20 thicker than the plates they connect.
Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1/2 in. diameter, averaging 3 3/4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/2 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 entire length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 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
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Steel double No. of Breasthooks, 4 Crutches, 3 1/2 deep floor
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Siemens Martin Steel
Manufacturer's name or trade mark, All angles Steel C of Scotland and plates West Cumberland Co.
The above is a correct description.
Builder's Signature, MacLachlan Lewis & Co. Surveyor's Signature, James Fairlie
John H. MacLachlan, Director. 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 steel* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings
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 Material
State also Length and Diameter of Lower Masts and Bowsprit *Repped as a Schooner with two pole masts as*

Auxiliary to steam power. Fore mast extreme 94.10 x 20 diam, two plates in the round 1/16 to 3/16; Main mast 90.3 x 19 diam, two plates in the round 1/16 to 3/16; Masts doubled
Fore yard extreme 51.0 x 12 diam, two plates in the round 1/16 to 3/16. Masts doubled
at partners and at heels. Yard doubled in way of knee hoop, and all plates tested at sea

NUMBER & LETTER for EQUIPMENT		CABLES, &c.		Test per Certificate	Inches per Rule	Machine where Tested and Number of Certificate	ANCHORS. N.		Weight. Ex. Stock.	Test per Certificate	Wght req'd per Rule.	Machine where Tested and Number of Certificate
SAILS.		Chain		135-3-1/4	1 3/4	270 x 1 3/4	Bower Anchors		1 30.0.5	20.4.1.4	30	4 Aug 87
Fore Sails,		Iron Stream Chain		135-2-	1 1/4	14-	Stream Anchor		1 30.3.14	20.4.1.4	30	14 Dec 87
Fore Top Sails,		or Steel Wire		90	3 3/4	90 x 11	Kedge		1 4.3.0.2	7.2.2.0	4 3/4	14 Dec 87
Fore Topmast Stay Sails,		or Hempen Strm		120	2 1/2	90 x 9	2nd Kedge.		1 2.3.0.2	5.0.0.0	2 1/2	14 Dec 87
Main Sails,		Cable		100	3 1/2	90 x 7 1/2						
Main Top Sails, and		Towline, Hemp.		120	5							
		or Steel Wire		120	4							
		Hawser										
		Warp										
		quality		good								

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *two* life Boats and *two* others.
The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights. How constructed? *of lead on iron sashes* How secured in ordinary weather? *by screw bolts & nuts*
What arrangements for deadlights in bad weather? *Solid top with bulls eyes*

Coal Bunker Openings. How constructed? *of plates & angles* How are lids secured? *with hatch bars* Height above deck? *12"*
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *3 Scuppers, 2 freeing ports 2.11 x 1.5 and 2 freeing pipes aft, each 3.6 x 1.10 & 2 freeing pipes fore*

Cargo Hatchways. How formed? *of plates and angles, Comings 36" above deck*
State size Main Hatch *19.10 x 14.0* Fore hatch *16.0 x 14.0* Quarter hatch *25.10 x 14.0 and 11.0 x 14.0*

If of extraordinary size, state how framed and secured? *One deep web plate in each of the three large hatches*
What arrangement for shifting beams? *ways, and three fore and afters in all*
Hatches, If strong and efficient? *yes 3" solid*

Order for Special Survey No. *203* Date *Feb 14 1884*
Order for Ordinary Survey No. *20* Date *—*
No. *20* in builder's yard.
State dates of letters respecting this case *Jan 20 1884, Feb 18 1884, April 7 1884 & 16 1884, and Sept 22 1884*

General Remarks (State quality of workmanship, &c.) *This vessel has been built in accordance with the approved tracing of midship section forwarded with the Report a Trac No 3416, with the accompanying approved tracings of Profile, Mast & rigging plans, and pumping plan; in compliance with the Secretaries letters dated as above, and the Rules in all other respects, including the Committees Circular No 3416, have been adhered to. She has a Forecastle deck 33 long, enclosed; a Bridge deck 36 long, and a Raised quarter deck 92.6 long. She has a double bottom constructed on the Cellular system 210 feet long with water capacity for 414 tons, a Fore peak tank with water capacity for 43 tons, and an after peak tank with water capacity for 40 tons, all tested as required by the Rules. The materials used in her construction and the workmanship are very good.*

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*, with the notation *Floors Iron*

The amount of the Entry Fee *£ 4 : - -* is received by me, *James Turpin*

Special *£ 65 : 4 : -* P. 5. 1884
(to be sent as per margin Certificate *Gratis*)
(Travelling Expenses, if any, *—*)

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

100 A 1 Steel
100 A 1 Steel
100 A 1 Steel

100 A 1 Steel
100 A 1 Steel
100 A 1 Steel