

4787 IRON SHIPS.

Rev 14/6/66

No. 2489 Survey held at Glasgow Date May 4th 1888
 on the Scot. Ste. "Scotia" Master Wells
 Tonnage under tonnage deck 270.2 Built at Glasgow When built 1880 Launched 19th Apr 1880
 Ditto of poop 0.00 or spar deck 0.00 By whom built Aitken & Mansel Owners Glasgow & Newcastle S. S. Co.
 Ditto of engine room 0.00
 Total Register tonnage 188.20 Port belonging to Grandemouth Destined Voyage Fewcastle
 Gross tonnage 270.20
 Surveyed while Building, Afloat, or in Dry Dock while building and afloat

Length aloft	Feet. Inches.	Extreme Breadth	Feet. Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet. Inches.	Power of Engines	Horse.	N ^o . of Decks
140.3	3	21.1	1	13.3	3	45		One
<i>(Dimensions of Ship per Register, length 140.3 breadth 21.1 depth 13.3)</i>								

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	16ths. required per Rule.	16ths. required per Rule.
Keel, if bar iron, depth and thickness	0 1/2 x 3 1/4	1 1/4 x 2				
Stem, if bar iron, moulding and thickness	0 1/2 x 2 1/4	0 1/4 x 2				
Stern-post, if bar iron, moulding and thickness	0 1/2 x 4	0 1/4 x 4				
Distance of Frames from moulding edge to moulding edge, all fore and aft	21	21				
Frames, Size of Angle Iron, single or double	3	2 1/2	50	3 1/2	2 1/2	10
Floors, depth and thickness of Floor Plate at mid line	1 1/2	1 1/2	50	1 3/4	1 3/4	10
Beams, Deck (N ^o . ") double Angle Iron, Plate, Tee, or Bulb Iron	0	0	50	5 1/4	5	10
Keelson, single or double plate, box, or intercostal	<i>intercostal</i>					
Side, single or double, plate, box, or intercostal	<i>as per sketch</i>					
Bilge (No. ") at each Bilge, single, or double, plate, box	3	3	50	3	3	10

	Inches in Ship.	Inches required per Rule.	16ths. required per Rule.	16ths. required per Rule.
Plates in Garboard Strakes, breadth and thickness	30	9	10	24
Butt Straps to outside plating, breadth and thickness	9	9	7	10
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	30	9	10	24
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	9	9	10	24
Stringers in Hold	3	3	5	10

Plates from Garboard to upper part of Bilges .. 9/10
 " from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold .. 7/10
 " from 3/4ths depth of Hold to lower edge of Sheerstrake .. 9/10
 " Sheerstrake, breadth and thickness .. 30 5/10 24 10
 Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness 30 9 10 24 10
 Angle Iron on ditto .. 3 3 5 10 24 10
 Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways .. 9 9 10 24 10
 Diagonal Tie Plates on ditto .. 9 9 10 24 10
 Planksheer, materials and scantlings *see Bulwarks*
 Waterway ditto ditto *see Bulwarks*
 Flat of Upper Deck, thickness and material .. 3 x 5 13 1/2
 " " how fastened to Beams *see Bulwarks*
 Ceiling betwixt Decks and in Hold, thickness and material .. 3 x 3 8 1/2
 Clamps or Spircketting ditto ..
 Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness ..
 Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams ..
 Main piece of Rudder, diameter at head .. 3 1/2
 " " " at heel .. 2 1/2
 (Can the Rudder be unshipped afloat) *Yes*
 Bulkheads, N^o. " Thickness of 30
 " Height up upper deck *riveted between two*
 " how secured to the sides of the ship *see Bulwarks*
 " size of vertical angle irons *see Bulwarks* and their distance apart *30 in*

The Frames extend in one length from *middle line* to *gunwale* rivetted through plates with (3/4 in.) rivets, about (5-) apart.
 The reverse angle irons on the floors extend in one length across the middle line from *side stringer* to *Q*
 " " " on the frames " " " from *middle line* to *gunwale*
 Keelson, how are the various lengths of plates or angle irons connected? *by linking pieces*
 Plates, Garboard, double rivetted to keel, double or at upper edge, with rivets (1 1/2 ins.) diameter, averaging (2 1/2) apart.
 " Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.
 " Butts from Keel to turn of bilge, worked carvel with butt straps (3/10 x 1/10) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? *No*
 " Edges from bilge to sheerstrake, worked carvel with a lining piece thick, or clencher, double or single rivetted; with rivets (10/16 in.) diameter, averaging (2 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? *No*
 " Edges of Sheerstrake, double or single rivetted? At upper edge single At lower edge double
 " Butts from bilge to planksheers, worked carvel with butt straps (1/10 x 1/10) thick, double or single rivetted; with rivets (10/16 in.) diameter, averaging (2 1/2 ins.) apart. Breadth of laps in double rivetting (3/4 in.) Breadth of laps in single rivetting (1/2 in.)
 Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? double
 Planksheer, how secured to the plating of the sides *see Bulwarks*
 Waterway " " planksheer and to the Beams *see Bulwarks*
 Deck Beams, how secured to the side? *welded knees rivetted to frames*
 Hold or Lower Deck ditto ..
 Paddle " " No. of breasthooks three crutches three
 What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Block Iron
 Manufacturer's name or trade mark ..

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Aitken & Mansel Surveyor's Signature A. D. ...

Lloyd's Register Foundation
IRON439-0410

4787 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? *Yes*

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*

Do the fillings between the ribs and plates fill in solid with single pieces? *or are they in short lengths of various thicknesses? Yes*

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes* and are the rivet holes well and sufficiently countersunk in the outer plate? *Yes*

Are there any rivets which either break into or have been put through the seams or butts of the plating? *a few in corners of butts*

Her Masts, Bowsprit, Yards, &c., are in *Wood* *Good* condition, and sufficient in size and length. (If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name.

She has SAILS.		CABLES, &c.			ANCHORS and their weights.			
No.			Fathoms.	Inches.	Tested to Tons.	No.	Weight.	Tested to Tons.
<i>1</i>	Fore Sails,	Chain	<i>180</i>	<i>1 1/2</i>	<i>18</i>	Bowers,	<i>1</i>	<i>18.0.0</i>
<i>2</i>	Fore Top Sails,	Hempen Stream Cable	<i>90</i>	<i>9</i>			<i>2</i>	<i>2.2</i>
<i>3</i>	Fore Topmast Stay Sails,	Hawser	<i>90</i>	<i>5 1/2</i>			<i>3</i>	<i>3.0</i>
<i>4</i>	Main Sails,	Towlines	<i>90</i>	<i>5</i>		Stream,	<i>1</i>	<i>13.37</i>
<i>5</i>	Main Top Sails,	Warp	<i>15</i>	<i>5</i>		Kedges,	<i>1</i>	<i>1.1.14</i>
		All of <i>Good</i> quality.	<i>180</i>	<i>3 1/2</i>				

Her Standing and Running Rigging *Galv. Wire & Hemp* sufficient in size and *Good* in quality.

She has *two 22 feet* Long Boat and *a 10 feet* Boat

The present state of the Windlass is *new* Capstan *new* and Rudder *new* Pumps *new and efficient*

Order for Special Survey No. *1* Date *1866* 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

2nd. On the plating during the progress of rivetting *Built under ordinary survey*

3rd. When the beams were in and fastened, and before the decks were laid *from the 1st of June to the 4th May 1866*

4th. When the ship was complete, and before the plating was finally coated

5th. After the ship was launched

State if she has a Spar Deck *No* Poop *No* or Forecastle *No*

General Remarks,

The Sheerstrake is increased an eighth of an inch in thickness as per Rule as compensation for excess of length

Side stringer formed with a foundation plate 10 x 7/8. Built Bar 1 x 7/8 and two Angle Bars 3 x 3 x 7/8 riveted to double Reverse Frames and extended aft fore and aft in line of Hold Beams as per accompanying approved Midship Section

Is fitted with a Steam Winch at Fore and a Crain at Main Hatch for taking in and discharging Cargo

In what manner are the surfaces preserved from oxidation? Inside *Red lead* + Outside *Red lead and Oil paints*

Ditto ditto

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

The amount of the Fee £ *3* : : : is received by me,

Special £ *6* : *6* : "

Certificate (if required) £ *5* : : "

Committee's Minute *15th June* 18 *66*

Character assigned *A*

MA

S. Darling

This Vessel appears eligible for the Class *A* recommended above

14 June 1866

Lloyd's Register Foundation