

# IRON SHIPS.

No. 2499 Survey held at Glasgow Date 29<sup>th</sup> June Recd 2/7/66 18 80  
on the Scow "Ophica" Master S  
Tonnage under tonnage deck 432.16 Built at Glasgow When built 1880 Launched 4<sup>th</sup> May 1880  
Ditto of poop or spar deck 10.55 By whom built W. Stephen & Sons Owners Burninning & Co.  
Ditto of engine room 154.14  
Total Register tonnage 327.55 Port belonging to London Destined Voyage N  
Gross tonnage 481.69  
Surveyed while Building, Afloat, or in Dry Dock whilst 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 <sup>o</sup> . of Decks
181			27.45			15.3					One
(Dimensions of Ship per Register, length 181 breadth 27.45 depth 15.1)											
Keel, if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule.								
if plate iron, breadth and thickness	1 x 2 1/4		1 1/2 x 2 1/2								
Stem, if bar iron, moulding and thickness	1 x 2 1/4		1 1/2 x 2 1/2								
if plate iron, breadth and thickness	1 x 5		1 1/2 x 5								
Stern-post, if bar iron, moulding and thickness	1 x 5		1 1/2 x 5								
if plate iron, breadth and thickness	1 x 5		1 1/2 x 5								
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23								
Frames, Size of Angle Iron, single or double	3 1/2 x 3		70								
Reversed Iron, if to every frame	to Hold Beams, and to the Gunwale										
or every third frame											
Floors, depth and thickness of Floor Plate at mid line	18 1/2		70								
Ditto ditto at Bilge Keelson	0		70								
Size of Reversed Angle Iron, and No. at top of Floor Plate	3 1/2 x 3		70								
Beams, Deck (N <sup>o</sup> . ) double Angle Iron, Plate, Tee, or Bulb Iron	1		70								
double or single Angle Iron, on upper edge	3 1/2 x 2 1/2		70								
average space between	3 ft 10 in		3 ft 10 in								
Hold, or Lower Deck (N <sup>o</sup> . ) double Angle, Tee, Plate, or Bulb Iron	1		70								
double or single Angle Iron, on upper edge	3 1/2 x 2 1/2		70								
average space between	3 ft 10 in		3 ft 10 in								
Paddle, sided and moulded, thickness of Plate size of Angle Iron											
Engine											
Keelson, single or double plate, box, or intercostal	single Plate										
Size of Plates	10		70								
Size of Angle Irons (if used)	4 x 3		70								
Side, single or double, plate, box, or intercostal	4 x 3		70								
Bilge (N <sup>o</sup> . ) at each Bilge, single, or double, plate, or box	4 x 3		70								
Bulb Bar for Bilge	1		70								
Transoms, material in plates or, if none, in what manner compensated for.											
Knight-heads, and Hawse Timbers	and Frames										
The Frames extend in one length from middle line to Gunwale											
The reverse angle irons on the floors extend in one length across the middle line from Hold Beams to											
on the frames											
from middle line to Gunwale											
Keelson, how are the various lengths of plates or angle irons connected?	by lined pieces										
Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (1/2 in.) diameter, averaging (3 1/2 in.) apart.											
Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (1 1/2 in.) apart.											
Butts from Keel to turn of bilge, worked carvel with butt straps (9/16 x 9/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (1 1/2 in.) 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 (3/4 in.) diameter, averaging (1 1/2 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 (9/16 x 9/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (1 1/2 in.) apart. Breadth of laps in double rivetting (5 1/2 in.) Breadth of laps in single rivetting (3 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 Explain by sketch	See Bulwarks										
Waterway, planksheer and to the Beams if necessary.	Gutter Waterway, with Iron Spikes to S.										
Deck Beams, how secured to the side? Welded 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.? Cast Iron Crown											
Manufacturer's name or trade mark											
We certify that the above is a correct description of the several particulars therein given.											
Builder's Signature	W. Stephen & Sons										
Surveyor's Signature	D. D. Darling										



4825 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 *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.		No.	Weight.
<i>a</i>	Fore Sails,		<i>Tested by Mr. Taylor</i>			<i>Tested by Mr. Taylor</i>		
	Fore Top Sails,		Chain	140	1 7/8	Bowers,	3	13.1.15
	Fore Topmast Stay Sails,		Hempen Stream Cable	90	9	Stream,	1	4.1.17
	Main Sails,		Hawser	90	7	Kedges,	3	2.2.0
	Main Top Sails,		Towlines	90	5 1/2			
			Warp					
			All of <i>Good</i> quality.					
Her Standing and Running Rigging			Sufficient in size and			in quality.		
She has <i>two</i>			Long Boat and			Pumps <i>two</i> and efficient		
The present state of the Windlass is			Capstan					

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought  
No. *425* Surveys held 2nd. On the plating during the progress of rivetting *Built under special survey*  
Date *Deck 16/65* while building 3rd. When the beams were in and fastened, and before the decks were laid *from the 25<sup>th</sup> Jan 1866*  
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated *to the 29<sup>th</sup> June 1866*  
No. *—* Section 18. 5th. After the ship was launched  
Date *—*

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

#### General Remarks,

*Fitted with Double Frames for half ship's length in midships; Angle Bar same size as Frames, viz 3 1/2 x 3 x 70. As compensation for excess of length the Sheerstrake is doubled with a 12 1/2 x 70 plate fitted to upper edge, and extended for three fourths the length. Bulb Bar fitted to Bilge Keelson 7 x 70. An upper plate on middle line Keelson 10 1/2 x 70. Gunwale Plate increased to 30 ins in width*

In what manner are the surfaces preserved from oxidation? Inside *Flat of Bottom with P. & C. Gum. with P. & C.*  
Ditto ditto Outside *And Oil Paints*

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

The amount of the Fee £ *5* is received by me,

Special £ *24* 2: 0:  
Certificate (if required) £ *—*

Committee's Minute *3<sup>rd</sup> July* 18 *66*

Character assigned *A*

*D. Darling*  
*I am of opinion this ship is eligible for Classification as recommended*  
*Lloyd's Register Foundation*  
*July 2/66*