

# Steel IRON SHIP.

No. 4597 Survey held at Bristol Date, First Survey 26 January Last Survey 17 May 1886  
 On the Screw Lug Dragon

(Received at London Office, JAE 22 MAY 1886)

TONNAGE under Tonnage Deck 40.14  
 Ditto of Third, Spar, or Awning Deck.  
 Ditto of Poop, or Raised Qr. Dk.  
 Ditto of Houses on Decks  
 Ditto of Forecastle  
 Gross Tonnage 40.14  
 Less Crew Space  
 Less Engine Room 32.53  
 Register Tonnage as cut on Beam 7.61

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING DECKED VESSEL.  
 Half Breadth (moulded) 6.79  
 Depth from upper part of Keel to top of Upper Deck Beams 7.83  
 Girth of Half Midship Frame (as per Rule) 12.37  
 1st Number 26.9.9  
 1st Number, if a 3-Decked Vessel .. deduct 7 feet  
 Length 66.08  
 2nd Number 1793.49  
 Proportions— Breadths to Length .. 4.8  
 Depths to Length—Upper Deck to Keel .. 8.4  
 Main Deck ditto ..

Master not known  
 Built at Bristol  
 When built 1886 Launched 20 April 1886  
 By whom built Newall & Co  
 Owners Gaselee Bros  
 Residence 90 Lower Thames Street London  
 Port belonging to London  
 Destined Voyage London  
 If Surveyed while Building, Afloat, or in Dry Dock.  
While building & afloat

LENGTH on deck as per Rule 66 Feet. 1 Inches. BREADTH—Moulded 13 Feet. 7 Inches. DEPTH top of Floors to Upper Deck Beams 7 Feet. 1 Inches. Do. do. Main Deck Beams 7 Feet. 1 Inches. Power of Engines 40 Horse. N° of Decks with flat laid out one N° of Tiers of Beams one

Dimensions of Ship per Register, length, 66.9 breadth, 13.56 depth, 7.0

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	5 x 7/8	5 x 7/8				
STEM, moulding and thickness	5 x 7/8	5 x 7/8				
STERN-POST for Rudder do. do.	5 x 2	5 x 2				
" " for Propeller	5 x 2	5 x 2				
Distance of Frames from moulding edge to moulding edge, all fore and aft	18	18				
FRAMES, Angle Iron, for 2/3 length amidships	2 1/2 x 2 1/2	11	2 1/2 x 2 1/2	11		
Do. for 1/3 at each end	2	3	2	3		
REVERSED FRAMES, Angle Iron	2	3	2	3		
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	8	8	3	3		
" thickness at the ends of vessel	9	9	4	4		
" depth at 2/3 the half-bdth. as per Rule	16	16				
" height extended	16	16				
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3	2 1/2	4	3	2 1/2	4
Single or double Angle Iron on Upper edge	36	36				
Average space						
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
BEAMS, Hold, or Orlop—Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
KEELSONS Centre line, single or double plate, box, or intercostal, Plates						
" Rider Plate						
" Bulb Plate to intercostal Keelson						
" Angle Irons	2 1/2	2 1/2	5	2 1/2	2 1/2	5
" Double Angle Iron Side Keelson	2 1/2	2 1/2	5	2 1/2	2 1/2	5
" Side intercostal Plate						
" do. Angle Irons						
" Attached to outside plating with angle iron						
BILGE Angle Irons						
" do. Bulb Iron						
" do. Intercostal plates riveted to plating for length						
BILGE STRINGER Angle Irons	2 1/2	2 1/2	5	2 1/2	2 1/2	5
Intercostal plates riveted to plating for length						
SIDE STRINGER Angle Irons						

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
DEPTH Moulded <u>7.6</u>				
Flat Keel Plates, breadth and thickness				
PLATES in Garboard Strakes, br'dth & thickness	27	4	27	4
" From Garboard to upper part of Bilges		3/2		3/2
" Of d'bling at Bilge, or increased thickness, and length applied				
" From up. prt of Bilge to l.r. edge of Sh'rstrake		3/2		3/2
" Main Sheerstrake, breadth and thickness	28	5	28	5
" Of d'bling at Sh'stk. & lng. applied				
" From M'n. to Up. or Spar Dk. Sh'rstrake				
" Up. or Spar Dk Sh'rstrake, br'dth & thckn'ss				
Butt Straps to outside plating, breadth & thickness	7 1/2	9 1/2	7 1/2	9 1/2
Lengths of Plating	six spaces			
Shifts of Plating, and Stringers	two spaces			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	15	4	15	4
Angle Iron on ditto	2 1/2	2 1/2	2 1/2	2 1/2
Tie Plates fore and aft, outside Hatchways	6	4	6	4
Diagonal Tie Plates on Beams No. of Pairs				
Flat of Up., Spar, or Awning Dk. P.P.	2 1/2		2 1/2	
How fastened to Beams				
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, or ways				
Diagonal Tie Plates on Beams, No. of pairs				
Flat of Middle Deck* do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Ho				
Orlop Beams				
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No.				
Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck*				
Ceiling betwixt Decks, thickness and material				
" in hold do. do.				
Main piece of Rudder, diameter at head	2 1/2		2 1/2	
" do. at heel	1 1/2		1 1/2	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 4 No. per Rule 4				
" Thickness of 3/16"				
" Height up main deck				
" How secured to sides of ship double frames				
" Size of Vertical Angle Irons 2 1/2 x 2 1/2 x 5 and distance apart 30 ins.				
" Are the outside Plates doubled two spaces of Frames in length?	Yes			

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 1/2 in. Rivets, about 4 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to upper part of Bilge and to alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 3/4 in. diameter, averaging 3 3/4 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 2 ins. from centre to centre.  
 " Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/2 in. diameter averaging 2 ins. from centre to centre.  
 " Butts of all Strakes at Bilge for full length, treble riveted with Butt Straps 1/16 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 2 ins. from cr. to cr.  
 " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/2 in. diameter, averaging 2 ins. from cr. to cr.  
 " Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.  
 " Butts of Main Sheerstrake, double riveted for full length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
 " Butts of Main Stringer Plate, double riveted for full length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.  
 " Breadth of laps of plating in double riveting 3 1/2 Breadth of laps of plating in single riveting ✓

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? No. of Breasthooks, 1 Crutches, deep floors

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Simon Martin steel

Manufacturer's name or trade mark, Steel Co. of Scotland & Lancashire Steel Co

The above is a correct description.

Builder's Signature, Newall & Co Surveyor's Signature, R. W. Croucher

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



Workmanship. Are the butts of plating planed or otherwise fitted? *Chipped & 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? *No*

Masts, Bowsprit, Yards, &c., are in 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 *one pole for signal light*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.							(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
CABLES, &c.							(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
N <sup>o</sup> .	Chain .....	60	1/2	6.000	1/2	Rutherford & Co. Ltd.	Bower Anchors	1	2.2.2	5.2.2.0	2.2.0	Rutherford & Co. Ltd.
	Fore Sails,					Cert. No. 16455	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					Cert. No. 2087
	Fore Top Sails,											
	Fore Topmast Stay Sails,											
	Main Sails,						Stream Anchor					
	Main Top Sails,						Kedge ...	1	3.0		3.0	
	and						2nd Kedge ...					

Standing and Running Rigging sufficient in size and in quality. She has Long Boat and  
The Windlass is Good Capstan and Rudder Good Pumps Good  
Engine Room Skylights. How constructed? *plates & angles* How secured in ordinary weather? *Hinged*  
What arrangements for deadlights in bad weather? *Round lights of thick glass*  
Coal Bunker Openings. How constructed? *Rings in deck* How are lids secured? *Lugs on covers fitting in grooves in rings* Height above deck? *Flush*  
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *Two scuppers & one freeing port on each side*  
Cargo Hatchways. How formed? *hove*  
State size Main Hatch Forehatch Quarterhatch  
If of extraordinary size, state how framed and secured?  
What arrangement for shifting beams?  
Hatches, If strong and efficient?

Order for Special Survey No. \_\_\_\_\_ Date \_\_\_\_\_  
Order for Ordinary Survey No. \_\_\_\_\_ Date \_\_\_\_\_  
No. 6 in builder's yard. 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 process of riveting  
3rd. When the beams were in and fastened, and before the decks were laid....  
4th. When the ship was complete, and before the plating was finally coated or cemented..  
5th. After the ship was launched and equipped  
Date of First survey *26 January*  
Date of Last Survey *17 May 1886*  
No. of visits *12*  
State dates of letters respecting this case

General Remarks (State quality of workmanship, &c.) *This vessel has been built under order survey, the steel used in her construction has been tested accordance with the Rules*  
*The Workmanship is good*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecabin, or raised quarter deck. (If double bottom, state particulars on separate form)  
How are the surfaces preserved from oxidation? Inside *Cement + Paint* Outside *Paint*  
I am of opinion this Vessel should be Classed *A. for Tug purposes*  
The amount of the Entry Fee .....£ 1 : 0 : 0 is received by me, *R.W.C.*  
Special .....£ 8 : 0 : 0 *19 May 1886*  
(to be sent as per margin). Certificate ... : 2 : 6  
(Travelling Expenses, if any, £) *Friday, 28th May, 1886.*  
Committee's Minute *18*  
Character assigned *A - for Tug purposes*  
*It is submitted that this vessel appears worthy to be classed A - for Tug purposes Steel*  
*Surveyor to Lloyd's Register of British and Foreign Ships*  
*26/5/86*  
*Lloyd's Register Foundation*