

IRON SHIPS.

Rec. 17/5/65
1865

No. 3345 Survey held at Glasgow Date 17th May
 on the Screw Steamer Cromwell Master [Signature]
 Tonnage under tonnage deck 553.88 Built at Glasgow When built 1865 Launched 27th Dec^r 1865
 Ditto of poop 1.43 By whom built J. & G. 88, St. B. (Lm) Owners J. J. J. Co. (Lm)
 Ditto of engine room 116.03 Port belonging to London Destined Voyage Coasting
 Total Register tonnage 438.30
 Gross tonnage 555.34
 If Surveyed while Building, Afloat, or in Dry Dock Whilst Building and afloat outfitting

Length aloft 177.4 Extreme Breadth 28.8 Depth from top of Upper Deck Beam to top of Floor 16 Power of Engines 90 N^o. of Decks One

Dimensions of Ship per Register, length breadth depth	Inches in Ship.		Inches required per Rule.		Plates in Garboard Strakes, breadth and thickness	Inches in Ship.	16ths. In Ship.	Inches required per Rule.	16ths. required per Rule.
	Inches.	16ths.	Inches.	16ths.					
Keel, if bar iron, depth and thickness	4	3	4	3	Ditto from Garboard to upper part of Bilges..	35	10/16	35	10
if plate iron, breadth and thickness	4	3	4	3		25 1/2	9/16	25 1/2	9
Stem, if bar iron, moulding and thickness	4	3	4	3	from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	9/16	9/16	9	8
if plate iron, breadth and thickness	4	3	4	3	from 3/4ths depth of Hold to lower edge of Sheerstrake	9/16	9/16	9	8
Stern-post, if bar iron, moulding and thickness	4	3	4	3	Sheerstrake, breadth and thickness	43	9/16	43	9
if plate iron, breadth and thickness	4	3	4	3	Butt Straps to outside plating, breadth and thickness	8 1/2	7/16	8 1/2	7
Distance of Frames from moulding edge to moulding edge, all fore and aft	21		21		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	25 1/2	9/16	25 1/2	9
Frames, Size of Angle Iron, single or double	4	3	4	3	Angle Iron on ditto	4 1/2	3/4	4 1/2	3 1/2
Reversed Iron, if to every frame or every other frame	3	3	3	3	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	10 1/2	9/16	10 1/2	8 1/2
Floors, depth and thickness of Floor Plate at mid line	18 1/2	3 1/2	18 1/2	3 1/2	Diagonal Tie Plates on ditto	10 1/2	9/16	10 1/2	8 1/2
Ditto ditto at Bilge Keelson	11 1/2	3 1/2	11 1/2	3 1/2	Planksheer, materials and scantlings	12	10 1/2	12	10
Size of Reversed Angle Iron, and No. at top of Floor Plate	3	3	3	3	Waterway ditto ditto	4 1/2	3/4	4 1/2	3 1/2
Beams, Deck (N ^o . —) double Angle Iron, Plate, Tee, or Bulb Iron	7	7/16	7	7/16	Flat of Upper Deck, thickness and material	2 1/2	3/4	2 1/2	3 1/2
double or single Angle Iron, on upper edge	2 1/2	3/4	2 1/2	3/4	how fastened to Beams	10	10 1/2	10	10
average space between	3 1/2	3/4	3 1/2	3/4	Ceiling	2 1/2	3/4	2 1/2	3 1/2
Hold, or Lower Deck (N ^o . —) double Angle, Tee, Plate, or Bulb Iron	7	7/16	7	7/16	Clamps or Spirketting ditto	20	9/16	20	19
double or single Angle Iron, on upper edge	2 1/2	3/4	2 1/2	3/4	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	4	3 1/2	4	3 1/2
average space between	3 1/2	3/4	3 1/2	3/4	Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	4	3 1/2	4	3 1/2
Paddle, sided and moulded, thickness of Plate size of Angle Iron					Stringers in Hold				
Engine					Flat of Lower Deck, thickness and material				
Keelson, single or double plate, iron, or intercostal	6	9/16	6	9/16	Main piece of Rudder, diameter at head	4 1/2	1 1/2	4 1/2	1 1/2
Size of Plates	22 1/2	9/16	22 1/2	9/16	" " " at heel	2 1/2	3 1/2	2 1/2	3 1/2
Size of Angle Irons	4 1/2	3/4	4 1/2	3/4	(Can the Rudder be unshipped afloat)				
Side, single or double, plate, box, or intercostal					Bulkheads, N ^o Four Thickness of	4 1/2	1 1/2	4 1/2	1 1/2
Bilge (No. —) at each Bilge, single, or double, plate, or box	4 1/2	3/4	4 1/2	3/4	Height up upper deck				

Transoms, material Plate or, if none, in what manner compensated for.
 Knight-heads, and Hawse Timbers Angle bars & plates
 The Frames extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (5th) apart.
 The reverse angle irons on the floors extend in one length across the middle line from Bilge to Bilge (upper part)
 " " " to the frames " and " from Gunwale to Gunwale alternately
 Keelson, how are the various lengths of plates or angle irons connected? Butt straps
 Plates, Garboard, double rivetted to keel, double rivetted at upper edge, with rivets (1 1/4 ins.) 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 (2 1/4 ins.) apart.
 Butts from Keel to turn of bilge, worked carvel with butt straps (9/16 to 1/2) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/4 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 (3/4 in.) diameter, averaging (2 1/4 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No.
 Edges of Sheerstrake, double and single rivetted? At upper edge Single At lower edge Double
 Butts from bilge to planksheers, worked carvel with butt straps (9/16 to 1/2) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/4 ins.) apart. Breadth of laps in double rivetting (5/8 diam) Breadth of laps in single rivetting (3/4 diam)
 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
 Waterway " " Planksheer and to the Beams if necessary. Stringer plate + upper edge of planksheer strakes with rivets & bolts
 Deck Beams, how secured to the side? Welded
 Hold or Lower Deck ditto Do
 Paddle " " " " " " No. of breasthooks None crutches
 What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Moss End and

Manufacturer's name or trade mark Glasgow Boiler Plate
 We certify that the above is a correct description of the several particulars therein given.
 Builder's Signature [Signature] Surveyor's Signature [Signature]
 Lloyd's Register Foundation

Workmanship. Are the lands or laps of the clenwork 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 about 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.

4100 Tons

She has SAILS.		CABLES, &c.			ANCHORS and their weights.			
No.		Tested by	Fathoms.	Inches.	Tested to Tons.	No.	Weight. Ex. Stock	Tested to Tons.
<u>1</u>	Fore Sails,	<u>J. C. Burrell</u>	<u>140</u>	<u>1 7/8</u>	<u>18 7/8</u>	<u>1</u>	<u>13.1.22</u>	<u>15.3.3</u>
<u>1</u>	Fore Top Sails,		<u>90</u>	<u>1 1/2</u>			<u>13.1.9</u>	<u>15.1.2</u>
<u>1</u>	Fore Topmast Stay Sails,		<u>90</u>	<u>5/8</u>			<u>11.2.0</u>	<u>13.7.2</u>
	Main Sails,						<u>16.0.1</u>	
	Main Top Sails,							
							<u>3.2.9</u>	

All of Good quality.

Her Standing and Running Rigging is of Steel & Galv. Iron sufficient in size and good in quality.

She has one Long Boat and two Sheers

The present state of the Windlass is New Capstan New and Rudder New Pumps New

Order for Special Survey No. 378 Date 13-11-65 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

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

5th. After the ship was launched

Built under Special Survey from 10th March to the 17th May 1865

State if she has a Spar Deck No Poop No or Forecastle Monkey Scautth

General Remarks. The extra strength of Compensation for the length being over Sea Depth is as sanctioned by the Committee in their Letter of 17th July 1865. By. Sheerstrake increased to 4 3/4 in width and the strake next beneath increased a 1/16th of an inch.

Fore and After Casks as high as Lower Deck, formed as water tanks with Corn Plated Decks 5/16 thick; Length of Fore Tank 30 feet, After one 18 feet, the Frames are Double in these spaces their whole Depth. Butts and Lands of Plating are Chain Rivetted where Double Rivetting is used; Six Pieces of Diagonals on upper Deck 10 1/2 x 7/16; Substructure of Wood with British Oak Stanchions 6 x 6; 4 1/2 feet apart and in every other respect the vessel is built in conformity with the annexed Midship Section

In what manner are the surfaces preserved from oxidation? Inside Red lead + Oil paint Outside Do.

It is the opinion of this Vessel should be Classed B

The amount of the Fee £ 5 : : is received by me, as Special £ 27 : 14 Certificate (if required) £ 10 : 0

Committee's Minute 19th May 1865

Character assigned B (A.C.P.)

A. Dalrymple
Robt. Graham

Hoyd's Register Foundation
19 May 1866