

IRON SHIPS.

2966

Rec. 21/11/62
18 62

No. 4538 Survey held at Port Glasgow
on the Ship "Thomas Bell"

Date 11th Oct.

Master Frank Pitt

Tonnage Gross 838 1/2 Engine Room _____ Register _____ Built at Port Glasgow

When Built 1862 By whom built John Reid & Co. Owners John Chism & others

Port belonging to Liverpool Destined Voyage Glyde to Liverpool and Calcutta

Surveyed Afloat or in Dry Dock Whale building

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 No.
.....	183		30	8	21	6	
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship. 18		Inches required per Rule. 18				Stem, $\frac{1}{2}$ bar iron, moulding and thickness		$\frac{1}{2} \times 3$	$\frac{1}{2} \times 3$
Floors, Size of Angle Iron, and No. single at bottom of Floor Plate	Inches. 4 1/2	Inches. 3	16ths. 8/16	Inches. 4 1/2	Inches. 3	16ths. 8/16	" if plate iron, breadth and thickness			
" depth and thickness of Floor Plate at mid line	2 1/2		10/16		2 1/2		Stern-post, $\frac{1}{2}$ bar iron, moulding and thickness		$\frac{1}{2} \times 3$	$\frac{1}{2} \times 3$
" depth and thickness of Floor Plate at Bilge Keelson	5		10/16		5		" " if plate iron, breadth and thickness			
" Size of Reversed Angle Iron, and No. single at top of Floor Plate	3		7/16		3		Keel, $\frac{1}{2}$ bar iron, depth and thickness		$\frac{1}{2} \times 3$	$\frac{1}{2} \times 3$
Frames, Size of Angle Iron, single or double, to lower deck, and on every other frame to upper deck	4 1/2		8/16		4 1/2		" if plate iron, breadth and thickness			
Beams, Deck (N ^o .) double Angle Iron	3		7/16		3		Garboard Plates, thickness..		Description of Iron.	
" Bulb Iron with double Angle Iron on top	3		2 1/2		3		From Garboard to upper part of Bilge		Glasgow	
" depth & thickness of plate amidships	8		8/16		7 3/4		From upper part of Bilge to Sheerstrakes		John & Co.	
" double or single Angle Iron, on lower edge	8		8/16		7 3/4		Sheerstrakes		Boiler	
" average space between	3 feet						Breadth & thickness of Butt Straps to outside plating		Plate	
" if wood (N ^o .) sided & moulded	3 feet						Planksheers		Material.	
" Hold, or Lower Deck (N ^o .)	3		2 1/2		3		Gunwale Plate or Stringer on ends of Up. Dk Beams		3/16 1/8 23/32 1/8	
" double Angle Iron or Bulb Iron with double Angle Iron on top	3		2 1/2		3		Angle Iron on ditto		5 x 4 x 3/8 5 x 4 x 3/8	
" depth & thickness of plate amidships	8		8/16		7 3/4		Waterway		Butter	
" double or single Angle Iron, on lower edge	8		8/16		7 3/4		Deck		Yellow Pine	
" average space between	3 feet						Ceiling in Hold		Red Pine	
" if wood (N ^o .) sided & moulded	3 feet						Ceiling betwixt Decks		Red Pine battens	
" Paddle, wood, sided and moulded or if Iron, size of Plate	3 feet						Beam Clamps			
Engine							" Shelf			
Keelson, wood, sided & moulded, iron, size of plate, if Iron, give sketch & dimensions	2 1/2		10/16		5		" Stringer Plates on ends of Hold or Lower Dk Beams		2 1/4 1/8 23/32 1/8	
" Side or Bilge	5		4		5		Ceiling between Decks		Angle Iron Red Pine battens	
" Number	5		4		5		Stringer or Tie Plates outside Hatchways		12 1/8 11 5/8 1/8	
							Deck Beam Clamps			
							" Shelf			
							Stringers in Hold		Angle Iron back to back	
							Deck, Lower			
							Deck, Upper, how fastened to Beams		By screw bolts & nuts from above	

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads " Iron Bulkheads, N^o. Two Thickness of 1/8 1/4

Hawse Timbers " Iron are they free from defects? Yes how secured to the sides of the ship Between double frames

The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with (7/8 in.) rivets, about (6 to 7 ins) apart.

The reverse angle irons on the floors extend in one length across the middle line from lower deck to Gunwale alternately

" " and on the frames " " from _____ to _____

Keelson, how are the various lengths of plates or angle irons connected? Angle Iron butt straps

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (7/8 in.) diameter averaging (3 1/2 in.) from centre to centre of rivet.

" Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre of rivets.

" Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes

" Edges from bilge to planksheer, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Yes

" Butts from bilge to planksheers, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (7/8 in.) diameter averaging (3 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2 in.) Breadth of laps in single rivetting (-)

Planksheer, how secured to the plating of the sides { Explain by sketch, }

Waterway " " planksheer and to the Beams { if necessary. }

Side trussing _____ breadth and thickness of plates _____ how secured? _____

Deck trussing By plates aloft and aft each side of hatchways 12 x 1 1/2 inches and diagonal plates where practicable

Deck Beams, how secured to the side? By Beam ends turned down

Hold or Lower Deck " Ditto Ditto

Paddle " _____

No. of breasthooks Five crutches _____ how are pointers compensated? _____

What description of iron is used for the angle iron and plate iron in the vessel? Durham Iron Co. Builder's Signature John Reid & Co.

2966

Workmanship. Are the lands or laps of the clenwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three 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? Solid lengths

Do the holes for rivetting plate to frames, lining pieces, 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

Her Masts, Yards, &c., are in Good condition, and sufficient in size and length. Lower masts and bowsprits of Iron

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.			
N ^o .			Fathoms.	Inches.	N ^o .	Weight.	
<u>Two</u>	Fore Sails,	Chain <u>Proved to be 60 tons</u>	<u>300</u>	<u>1 5/8</u>	Bower, <u>Wood staked, Frogman's</u>	<u>1</u>	<u>26.0 - 18</u>
<u>Two</u>	Fore Top Sails,	" <u>Stream</u>	<u>50</u>	<u>3/4</u>	" <u>Wood do Common</u>	<u>1</u>	<u>27.0 - 11</u>
<u>Two</u>	Fore Topmast Stay Sails,	Hempen Stream Cable	<u>90</u>	<u>10</u>	Stream, <u>Wood staked, Frogman's</u>	<u>1</u>	<u>8.3 - 14</u>
<u>Two</u>	Main Sails,	Hawser	<u>90</u>	<u>8</u>	Kedge, <u>Wood do Common</u>	<u>1</u>	<u>6.2 - 14</u>
<u>Two</u>	Main Top Sails,	Towlines	<u>90</u>	<u>5</u>	" <u>do do</u>	<u>1</u>	<u>2.3 - 14</u>
		Warp					
		All of <u>Good</u> quality.					

and well found in other sails
 Her Standing and Running Rigging Rembr sufficient in size and Good in quality.
 She has One Long Boat and Life and two others
 The present state of the Windlass is Good Capstan Good and Rudder Good Pumps 2 Iron & 2 Lead Good

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17.

1st.	On the several parts of the frame, when in place, and before the plating was wrought	} <u>Specially surveyed while building from 29th March 1862 to 11th Oct 1862. on all 30 visits.</u>
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	

This vessel has been built under special survey as per order N^o 251. is fitted with gutter waterways and Iron bulwarks.

In what manner are the surfaces preserved from oxidation? Inside three coats of Derby Red and Portland cement to bulk, outside with three coats of Derby Red and one coat of Bell's composition on bottom

I am of opinion this Vessel should be classed 12 A 1

The amount of the Fee£ 5 : " : " is received by me,
 Special£ 45 : 18 : "

X Certificate (£ required)£ " : " : "

Committee's Minute 25th November 1862

Character assigned A 1 for 12 Years

[Signature]

This sailing ship appears eligible for the Class as recommended by the Committee of the 25th Nov 1862.

John Chasem 46, Liverpool.

