

IRON SHIPS.

Requisition 42314

No. 4865 Survey held at Port Glasgow
on the Ship "Soukar"Date 13th February

1865

Master Walker

Tonnage Gross 1304 ⁴¹/₁₀₀ Engine Room

Register

Built at Port Glasgow

Under deck 1198 ⁴⁹/₁₀₀ Deck House 105 ⁷³/₁₀₀

When Built 1864

Launched 30th November 1864

By whom built John Reid & Co.

Owners Smith, Fleming & Co. Port belonging to London

Destined Voyage Clyde to Bombay

Surveyed Afloat or in Dry Dock While 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.
229 ⁶ / ₁₀		33 ³ / ₁₀		23 ² / ₁₀			
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.					
24	21						
Floors, Size of Angle Iron, and No. single at bottom of Floor Plate	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	Inches. required per Rule.	16ths. required per Rule.	10ths. required per Rule.
5 3 48 5 3 98							
depth and thickness of Floor Plate at mid line	24	106	23 ³ / ₁₀	106			
depth and thickness of Floor Plate at Bilge Keelson	10	106	10	106			
Size of Reversed Angle Iron, and No. single at top of Floor Plate	3 ¹ / ₂ 3 86	3 ¹ / ₂ 3 86					
Frames, Size of Angle Iron, single or double	5 3 86	5 3 86					
Reversed Iron, to every frame and on every alternate frame to gunwale	3 ¹ / ₂ 3 86	3 ¹ / ₂ 3 86					
Beams, Deck (N ^o .) double Angle Iron, Plate, or Bulb Iron	8 ¹ / ₂	86	84	86			
double or single Angle Iron, on upper edge	3 3 86	3 3 86					
average space between	3 feet 6 inches	3 feet 6 inches					
if wood (N ^o .) sided & moulded							
Hold, or Lower Deck (N ^o .) double Angle Iron, Plate, or Bulb Iron	8 ¹ / ₂	86	84	86			
double or single Angle Iron on upper edge	3 3 86	3 3 86					
average space between	3 feet 6 inches	3 feet 6 inches					
if wood (N ^o .) sided & moulded							
Paddle, wood, sided and moulded, or if Iron, size of Plate							
Engine " " " " "							
Keelson, single plate, box , or intercostal	36	86	27	48			
Size of Plates double ^{double} intercostal	21	48					
Size of Angle Irons (Double)	5 4 ¹ / ₂ 86	5 4 ¹ / ₂ 86					
Ditto Bilge (No. 2) Double Angle Iron	5 4 ¹ / ₂ 86	5 4 ¹ / ₂ 86					
Transoms, material Iron or, if none, in what manner compensated for.							
Knight-heads, and Hawse Timbers Iron							
The Frames or Ribs extend in one length from Keel to Gunwale							
The reverse angle irons on the floors extend in one length across the middle line from Hold beams to Gunwale alternately							
Keelson, how are the various lengths of plates or angle irons connected? By Angle Iron butt straps							
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 ¹ / ₂ in.) diameter averaging (4 ¹ / ₂ in.) from centre to centre of rivet.							
Edges from Garboards to upper part of bilge, worked carvel with a lining piece (in.) thick, or clencher, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 ¹ / ₂ in.) from centre to centre of rivets.							
Butts from Keel to turn of bilge, worked carvel with a lining piece (10/16 in.) thick, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 ¹ / ₂ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No							
Edges from bilge to sheerstrake, worked carvel with a lining piece (in.) thick, or clencher, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 ¹ / ₂ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No							
Edge of Sheerstrake, double or single rivetted?							
Butts from bilge to planksheers, worked carvel with a lining piece (10/16 in.) thick, double or single rivetted; rivets (7/8 in.) diameter averaging (3 ¹ / ₂ in.) from centre to centre of rivets. Breadth of laps in double rivetting (5 in.) Breadth of laps in single rivetting ()							
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?							
Planksheer, how secured to the plating of the sides							
Waterway " " planksheer and to the Beams							
Deck Beams, how secured to the side? Beam ends turned down							
Hold or Lower Deck " Beam ends turned down							
Paddle " "							
No. of breasthooks Five crutches Five how are pointers compensated?							
What description of iron is used for the angle iron and plate iron in the vessel? Messend Iron 6: & Consello Iron 6:							

Stem, if bar iron, moulding and thickness	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	10ths. required per Rule.
8 ¹ / ₂ x 3			8 ¹ / ₂ x 3	
if plate iron, breadth and thickness				
8 ¹ / ₂ x 3			8 ¹ / ₂ x 3	
Stern-post, if bar iron, moulding and thickness				
8 ¹ / ₂ x 3			8 ¹ / ₂ x 3	
if plate iron, breadth and thickness				
Keel, if bar iron, depth and thickness				
8 ¹ / ₂ x 3			8 ¹ / ₂ x 3	
plate iron, breadth and thickness				
Garboard Plates, Breadth and thickness	36	106	36	106
From Garboard to upper part of Bilge				
From upper part of Bilge to Sheerstrakes				
Sheerstrakes, Butts straps extend from frame above	36	126	36	126
Butt Straps to outside plating, Breadth and thickness	10	106		
Planksheers				
Gunwale Plate or Stringer on ends of Up. Dk Beams	32	106	32	106
Angle Iron on ditto	5 x 4 ¹ / ₂ x 96		5 x 4 ¹ / ₂ x 96	
Diagonal Tie Plates on Beams	12	106	12	106
Waterway Iron gutter				
Deck Yellow Pine	4		4	
Ceiling in Hold in floor American Rock Elm	3			
Ceiling betwixt Decks Red Pine battens	4 x 2 ¹ / ₂			
Beam Clamps or Spirketting				
Shelf				
Stringer Plates on ends of Hold or Lower Dk Beams	24	106	24	106
Ceiling between Decks Angle Iron	5 x 4 ¹ / ₂ x 96		5 x 4 ¹ / ₂ x 96	
Stringer or Tie Plates outside Hatchways	12	106	12	106
Deck Beam Clamps or Spirketting				
Shelf				
Stringers in Hold Double Angle Iron	5 x 4 ¹ / ₂ x 96		5 x 4 ¹ / ₂ x 96	
Deck, Lower Yellow Pine	3 ¹ / ₂			
Deck, Upper, how fastened to Beams By screws bolts & nuts from above				
Bulkheads, N ^o . One Thickness of 7/8				

how secured to the sides of the ship Between double frames
size of vertical angle iron and their distance apart 3 ¹/₂ x 3 ¹/₂ about 30 inches apart

rivetted through plates with (7/8 in.) rivets, about (7 inches) apart.

The reverse angle irons on the floors extend in one length across the middle line from Hold beams to Gunwale alternately
and on the frames " " " " from " to "

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

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 ¹/₂ in.) diameter averaging (4 ¹/₂ in.) from centre to centre of rivet.Edges from Garboards to upper part of bilge, worked carvel with a lining piece (in.) thick, or clencher, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 ¹/₂ in.) from centre to centre of rivets.Butts from Keel to turn of bilge, worked carvel with a lining piece (10/16 in.) thick, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 ¹/₂ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? NoEdges from bilge to sheerstrake, worked carvel with a lining piece (in.) thick, or clencher, double or single rivetted; rivets (7/8 in.) diameter, averaging (3 ¹/₂ in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Edge of Sheerstrake, double or single rivetted?

Butts from bilge to planksheers, worked carvel with a lining piece (10/16 in.) thick, double or single rivetted; rivets (7/8 in.) diameter averaging (3 ¹/₂ in.) from centre to centre of rivets. Breadth of laps in double rivetting (5 in.) Breadth of laps in single rivetting ()

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?

Planksheer, how secured to the plating of the sides Explain by sketch
Waterway " " planksheer and to the Beams if necessary.

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

Hold or Lower Deck " Beam ends turned down

Paddle " "

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

What description of iron is used for the angle iron and plate iron in the vessel? Messend Iron 6: & Consello Iron 6:

Builder's Signature

John Reid & Co.

IRON438-014

Workmanship. Are the lands or laps of the clenchwork 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.

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.		
N ^o .			Fathoms.	Inches.	N ^o .	Weight.
	Fore Sails,	Chain	300	1 1/2	Bower,	39.3.20
	Fore Top Sails,	" Stream	90	1	"	39.3.7
	Fore Topmast Stay Sails,	Hempen Stream Cable	90	1 1/2	Stream,	38.2.5
	Main Sails,	Hawser	90	10	"	13.1.17
	Main Top Sails,	Towlines	90	8		
		Warp	90	6	Kedge,	8.2.18
		All of <u>Good</u> quality.			"	3.2.4

Her Standing and Running Rigging Hemp sufficient in size and Good in quality.

She has Two Life Long Boat and Three others

The present state of the Windlass is Brown's patent Capstan Two others Good and Rudder Good with Pumps Two Cast metal & one lead Good

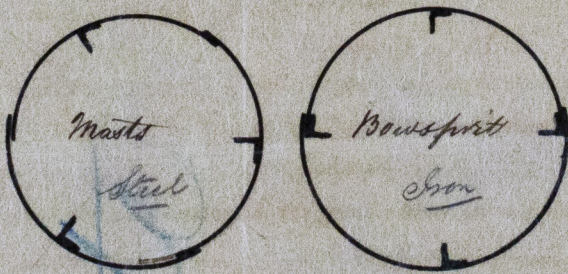
General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

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 3rd March 1864 to 13th July 1865 in all 45 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 314, as per Specification and agreeable to the Rules, Table B for A1 grade; is fitted a centre middle line Keel plate 32 1/2 inches deep by 1 1/8 thick, and a flat middle line Keelson plate 36 inches broad by 1 1/8 inch thick, the same being secured to the floors, and middle line Keel plate by Angle Irons; is fitted with Intercoastal side Keelsons about midway between the bilge and middle line Keelson. Is fitted with an Iron gutter waterway and Iron bulwarks at the request of the Owners, instead of wood as named in the Specification

The Testing certificates of the Bower Anchors are dated 3rd Nov^r. 1864, and of the Chain Cables 2nd Nov^r. 1864, signed by David Logan, Superintendent, Lepton Proving Machine. The objectionable rivets taken notice of by Mr Martin on his late visit have been carefully attended to and made good.

Masts	Thickness of plating	Rivetting of Butts	Rivetting of Edges	Size of Angle Iron	N ^o of Ditto	Diameter
Main Mast <u>Steel</u>	6/16	Double	Single	4x3x5/8	3	32 ins
Fore Mast <u>Steel</u>	6/8	"	"	4x3x5/8	3	32 ins
Mizen Mast <u>Steel</u>	5/8	"	"	4x3x5/8	3	27 ins
Bowsprit <u>Iron</u>	7/8	"	Double	4x3x5/8	4	27 ins



In what manner are the surfaces preserved from oxidation? Portland Cement between floors to upper part of bilges, three coats of Red lead inside and outside, and two coats of Peacock's composition on bottom.

He is of opinion this Vessel should be classed A1

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

Special£ 65 : 4 : "

Certificate (required)£ " : " : "

Committee's Minute 17th February 1865

Character assigned A1

A+C.P.

This sailing ship of Iron, appears to be N^o 13 in my Report of Ships seen building in Liverpool district last August. The objections therein stated, are reported to have been made good. It will be observed the lower Masts are of Steel. She appears eligible for classing a second time Feb^r 1865.