

IRON SHIP.

Run 19/8/73
18

Survey held at Dunfermline Date, First Survey _____ Last Survey _____

On the S.S. "African" Yard Number _____ Master Proud

TONNAGE under Deck } 686.46 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, } 420.37 SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Poop, or } 4.01 HALF BREADTH (moulded) 15.5
 Raised Or. Dk. } 4.01 DEPTH from upper part of Keel to top of Upper Deck Beams 23.75
 Ditto of Houses } 4.01 GIRTH of Half Midship Frame (as per Rule) 35.5
 on Deck 1st NUMBER 74.75
 Ditto of Forecastle } 1071.91 1st NUMBER, if a THREE-DECKED VESSEL
 Gross Tonnage } 40.93 deduct 7 feet 67
 Less Crew Space } 235.46 LENGTH 230
 Less Engine Room } 836.45 2nd NUMBER 15582
 Register Tonnage } as cut on Beam } PROPORTIONS—Breadths to Length 7
 Depths to Length—Upper Deck to Keel 9
 Main Deck ditto 13

Built at Glasgow
 When built 1869 Launched May 169
 By whom built London & Glasgow Co.
 Owners C. Williamson
 Port belonging to Leith
 Destined Voyage _____
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 230 Breadth—Moulded 31 DEPTH top of Floors to Upper Deck Beams 23 Do. do. Main Deck Beams 16 Power of Engines 94 Horse 2 N° of Decks with flat laid 2 N° of Tiers of Beams 3

Dimensions of Ship per Register, length, breadth, depth,	Inches In Ship.	Inches per Rule.	Inches In Ship.	Inches per Rule.	16ths required per Rule per Rule			
KEEL, depth and thickness	8 1/2 x 3	8 1/2 x 2 1/2	8 1/2 x 3	8 x 2 1/2	7	6	7	6
STEM, moulding and thickness	8 1/2 x 3	8 x 2 1/2	8 1/2 x 3	8 x 2 1/2	7	6	7	6
STERN-POST for Rudder do. do. for Propeller	7 1/2 x 5 1/2	8 x 5	7 1/2 x 5 1/2	8 x 5	7	6	7	6
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 in	23 in	24 in	23 in	7	6	7	6
FRAMES, Angle Iron, for 1/2 length amidships	4 1/2 x 3	7	6	7	6			
Do. for 1/2 at each end	4 1/2 x 3	7	6	7	6			
REVERSED FRAMES, Angle Iron	3 x 2 1/2	7	6	7	6			
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	2 1/2	2 1/2	2 1/2	2 1/2	7	6	7	6
thickness at the ends of vessel	2 1/2	2 1/2	2 1/2	2 1/2	7	6	7	6
depth at 1/2 the half-bdth. as per Rule	2 1/2	2 1/2	2 1/2	2 1/2	7	6	7	6
height extended at the Bilges	2 1/2	2 1/2	2 1/2	2 1/2	7	6	7	6
BEAMS, Upper, Spar, or Awning Deck	6 x 6	6 x 6	6 x 6	6 x 6	7	6	7	6
Single or Double Ang. Iron, Plate or Tee Bulb Iron	2 1/4 x 2 1/4	7	6	7	6			
Single or double Angle Iron on Upper edge	2 1/4 x 2 1/4	7	6	7	6			
Average space	alternate framed	alternate framed	alternate framed	alternate framed	7	6	7	6
BEAMS, Main or Middle Deck	7 1/2 x 7	7	6	7	6			
Single or Double Ang. Iron, Plate or Tee Bulb Iron	2 1/4 x 2 1/4	7	6	7	6			
Single or double Angle Iron on Upper Edge	2 1/4 x 2 1/4	7	6	7	6			
Average space	alternate framed	alternate framed	alternate framed	alternate framed	7	6	7	6
BEAMS, Lower Deck, Hold or Orlop	7 1/2 x 7	7	6	7	6			
Single or Double Ang. Iron, Plate or Tee Bulb Iron	2 1/4 x 2 1/4	7	6	7	6			
Single or double Angle Iron on Upper Edge	2 1/4 x 2 1/4	7	6	7	6			
Average space	alternate framed	alternate framed	alternate framed	alternate framed	7	6	7	6
KEELSONS Centre line, single or double plate, box, or intercostal plates	15 1/2 x 12	15 x 12	15 1/2 x 12	15 x 12	7	6	7	6
" Rider Plate	15 1/2 x 12	15 x 12	15 1/2 x 12	15 x 12	7	6	7	6
" Bulb Plate to Intercostal Keelson	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" Angle Irons	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" Double Angle Iron Side Keelson	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" Side Intercostal Plate	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" do. Angle Irons	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" Attached to outside plating with angle iron	no	should be	no	should be	7	6	7	6
BILGE Angle Irons	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" do. Bulb Iron	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
" do. Intercostal plates riveted to plating for length	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
BILGE STRINGER Angle Irons	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
Intercostal plates riveted to plating for length	5 x 4 1/2	5 x 3 1/2	5 x 4 1/2	5 x 3 1/2	7	6	7	6
SIDE STRINGER Angle Irons	3 1/2 x 2 1/2	7	6	7	6			
Transoms, material. Knight-heads. Hawse Timbers.								
Windlass								
Pall Bitt								

Flat Keel Plates, breadth and thickness	Inches In Ship.	16ths In Ship.	Inches required	16ths required
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of clenching at Bilge, or increased thickness, and length applied <u>2 1/2</u> ft up. part of Bilge to lr. edge of Sh'rstrake	33	11	36	11
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	36	14	36	13
Up. or Spar Dk Sh'rstrake, brdth & thickness	30	8	36	10
Butt Straps to outside plating, breadth & thickness				
Lengths of Plating			46	8
Shifts of Plating, and Stringers				
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	25	8	32	7
Angle Iron on ditto	2 1/2 x 3 1/2	2 1/2 x 3 1/2	4 x 4 x 8	
Tie Plates fore and aft, outside Hatchways	9 x 8	9 x 8	10 1/2	7
Diagonal Tie Plates on Beams No. of Pairs,	9 x 8	9 x 8	10 1/2	7
Planksheer material and scantling				
Waterways do. do.				
Flat of Upper Deck do. do.				
How fastened to Beams			46	
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	33	12	32	9
Is the Stringer Plate attached to the outside plating?	no		required	
Angle Irons on ditto, No. 1	5 x 3 1/2 x 8	5 x 3 1/2 x 8	4 x 4 x 8	
Tie Plates, outside Hatchways	7 1/2 x 16 in thickness	7 1/2 x 16 in thickness		
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings	5 in. Leak	5 in. Leak		
Flat of Middle Deck do. do.	3 in. H. Rem	3 in. H. Rem		
How fastened to Beams	galvanized	galvanized	Screw Bolts & Nuts	
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	20	13	24	8
Is the Stringer Plate attached to the outside plating?	no		required	
Angle Irons on ditto, No. 1	5 x 3 1/2 x 8	5 x 3 1/2 x 8	4 x 4 x 8	
Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material in hold do. do.	5 3/4		5 3/4	
Main piece of Rudder, diameter at head do. at heel	3		3	
Can the Rudder be unshipped afloat?				
Bulkheads No. 5 Thickness of	7/16	7/16		
Height up				
How secured to sides of ship				
Size of Vertical Angle Irons and distance apart				
Are the outside Plates doubled two spaces of Frames in length?				

The FRAMES extend in one length from _____ to _____ Riveted through plates with _____ in. Rivets, about _____ apart.

The REVERSED ANGLE IRONS on floors and frames extend _____ middle line to _____ and to _____ alternately

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

PLATING. Garboard, double riveted to Keel, with rivets _____ in. diameter, averaging _____ ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets _____ in. diameter, averaging _____ ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets _____ in. diameter averaging _____ ins. from centre to centre.

Butts of _____ Strakes at Bilge for _____ length, treble riveted with Butt Straps _____ thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets _____ in. diameter, averaging _____ ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets _____ in. diameter, averaging _____ ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for _____ length amidships. Butts of Upper or Spar Sheerstrake, treble riveted _____ length amidships.

Butts of Main Stringer Plate, treble riveted for _____ length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for _____ length.

Breadth of laps of plating in double riveting _____ Breadth of laps of plating in single riveting _____

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? _____

Waterway, how secured to Beams _____ (Explain by Sketch, if necessary.)

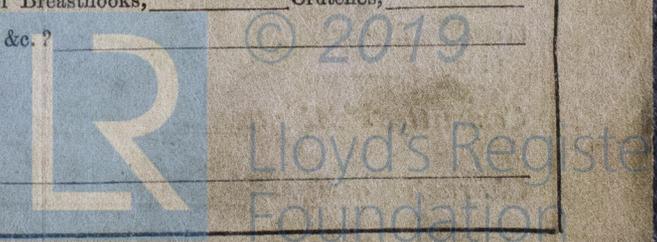
Beams of the various Decks, how secured to the sides? _____ No. of Breasthooks, _____ Crutches, _____

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

Manufacturer's name or trade mark, _____

The above is a correct description.

Builder's Signature, _____ Surveyor's Signature, _____



Workmanship. Are the butts of plating planed or otherwise fitted? _____
 Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? _____
 Are the fillings between the ribs and plates solid single pieces? _____
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? _____
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? _____
 Do any rivets break into or through the seams or butts of the plating? _____

Masts, Bowsprit, Yards, &c., are _____ in _____ condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.
 State also Length and Diameter of Lower Masts and Bowsprit _____

NUMBER for EQUIPMENT			Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.						Bowers ...					
	Fore Sails,	Chain ...						(Machine where Tested, date, and name of Superintendent.)					
	Fore Top Sails,	Hempen Stream						Stream ...					
	Fore Topmast Stay Sails	Cable						Kedges ...					
	Main Sails,	Hawser ...											
	Main Top Sails,	Towlines ...											
	and	Warp ...											
		quality _____											

Standing and Running Rigging _____ sufficient in size and _____ in quality. She has _____ Long Boat and _____
 The Windlass is _____ Capstan _____ and Rudder _____ Pumps _____
Engine Room Skylights.—How constructed? _____ How secured in ordinary weather? _____
 What arrangements for deadlights in bad weather? _____
Coal Bunker Openings.—How constructed? _____ How are lids secured? _____ Height above deck? _____
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? _____
Cargo Hatchways.—How formed? _____
 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. _____	DATES of Surveys held while building as per Section 16.	1st. On the several parts of the frame, when in place, and before the plating was wrought _____
Date _____		2nd. On the plating during the process of riveting _____
Order for Ordinary Survey No. _____		3rd. When the Beams were in and fastened, and before the decks were laid _____
Date _____		4th. When the ship was complete, and before the plating was finally coated or cemented _____
No. _____ in builder's yard.		5th. After the ship was launched and equipped _____

General Remarks, *The upper deck stringer plate are rather less than required, in sectional area Deficiencies, The upper deck Sheerstrake is 3/16 of an inch less than rules require as a 3 deck'd vessel Lopside strake of shell plating, 1 strake below main deck, and 2 strakes 100 A class at Bilges are 1/16 of an inch less than required. The Butts of 3 strakes round Bilges, the Sheerstrakes and stringer plates should be triple rivetted for 1/2 length amidships. The main & hold beam stringer plates should be connected to shell plating, and the frames are 24 ins apart, in lieu of 23 ins side intercostal keelson is not connected to shell.*
Excesses, The main sheerstrake is 3/16 of an inch thicker than required as a 3 deck'd vessel one strake of plating in bottom 1/16 thicker do. 100 A class The seams and Butts of shell plating are double rivetted with 1/8 rivets in lieu of 3/16, allowed by the rules. Frames are double from Bilge to Bilge, for about 1/2 length amidships, as also the floor plates, and main keelson. Side intercostal plates 3/16 in thickness more than required. Vessel had 5 Bulkheads, in lieu of 4, and are 1/2 inch thicker than required.
 State if one, two or three decked vessel, or if spar or arming decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside _____ Outside _____
 I am of opinion this Vessel should be Classed _____
 The amount of the Entry Fee ... £ : : is received by me,
 Special ... £ : :
 Certificate ... £ : :
 (Travelling Expenses) (if any) £ _____

Committee's Minute _____ 18 _____
 Character assigned _____

