

## IRON SHIP.

14696 Recd 21/6/78

No. 6498 Survey held at Greenock Date, First Survey 28<sup>th</sup> November 1844 Last Survey 19<sup>th</sup> June 18 45On the Screw Steamer "Umballa"Master Arthur MorrisTONNAGE under 685.14 ONE, OR TWO DECKED, THREE DECKED VESSEL.Ditto of Third, Spar, or Awning Deck. 84.23 SPAR, OR AWNING DECKED VESSEL.Ditto of Poop, 23.30 HALF BREADTH (moulded) 14 Feet.Ditto of Houses on Deck 44.01 DEPTH from upper part of Keel to top of Upper Deck Beams 14.92Gross Tonnage 839.41 GIRTH of Half Midship Frame (as per Rule) 24.5Less Crew Space 42.64 1st NUMBER 59.42Less Engine Room 302.49 1st NUMBER, if a THREE-DECKED VESSEL 59.42Register Tonnage as cut on Beam 494.55 LENGTH 230PROPORTIONS—Breadths to Length 8.21Depths to Length—Upper Deck to Keel 12.83Main Deck ditto 12.83Built at GreenockWhen built 1844:45 Launched 20<sup>th</sup> August 45By whom built Caird & Co.Owners British India Steam Navigation Co.Port belonging to GlasgowDestined Voyage Aden

Surveyed while Building, Afloat, or in Dry Dock

LENGTH on deck as per Rule 230.0 BREADTH—Moulded 28.0 DEPTH top of Floors to Upper Deck 16.26 Power of Engines 130 Horse. N<sup>o</sup>. of Decks with flat laid Three N<sup>o</sup>. of Tiers of Beams ThreeDimensions of Ship per Register, length, 230.75 breadth, 28.25 depth, 16.2KEEL, depth and thickness 8x23 Inches in Ship. Inches per Rule 1844STEM, moulding and thickness 8x23 Inches in Ship. Inches per Rule 1844STERN-POST for Rudder do. do. 42x14 Inches in Ship. Inches per Rule 1844for Propeller 42x14 Inches in Ship. Inches per Rule 1844Distance of Frames from moulding edge to moulding edge, all fore and aft 23 (Class 100A)FRAMES, Angle Iron, for  $\frac{1}{2}$  length amidships 32 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Do. for  $\frac{1}{4}$  at each end 32 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844REVERSED FRAMES, Angle Iron 32 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844FLOORS, depth and thickness of Floor Plate 14 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844at mid line for half length amidships 14 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844thickness at the ends of vessel 9 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844depth at  $\frac{1}{4}$  the half-bdth. as per Rule 9 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844height extended at the Bilges 36 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844BEAMS, Upper, Spar, or Awning Deck 42 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Single or double Ang. Iron, Plate or Tee Bulb Iron 42 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Single or double Angle Iron on Upper edge 46 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Average space 46 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844BEAMS, Main, or Middle Deck 62 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Single or double Ang. Iron, Plate or Tee Bulb Iron 62 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Single or double Angle Iron on Upper Edge 46 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Average space 46 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844BEAMS, Lower Deck, Hold, or Orlop 4 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Single or double Ang. Iron, Plate or Tee Bulb Iron 4 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Single or double Angle Iron on Upper Edge 46 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Average space 46 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844KEELSONS Centre line, single or double plate 22 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844do. Intercoastal, Plates 22 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Rider Plate 4 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Bulb Plate to Intercoastal Keelson 4 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Angle Irons 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Double Angle Iron Side Keelson 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Side Intercoastal Plate 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844do. Angle Irons 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Attached to outside plating with angle iron 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844BILGE Angle Irons 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844do. Bulb Iron 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844do. Intercoastal plates riveted to plating for length 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844BILGE STRINGER Angle Irons 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Intercoastal plates riveted to plating for length 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844SIDE STRINGER Angle Irons 5 Inches in Ship. Inches in Ship. 16ths. Inches required per Rule 1844Transoms, material. Knight-heads. Hawse Timbers. IronWindlass Iron Patent Pall Bitt IronThe FRAMES extend in one length from Keel to GunwaleThe REVERSED ANGLE IRONS on floors and frames extend from middle line to GunwaleKEELSONS. Are the various lengths of Plates and Angle Irons properly connected? YesPLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter; averaging 5 ins. from centre to centre.Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3/4 ins. from centre to centre.Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3/4 ins. from centre to centre.Butts of three Strakes at Bilge for half 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 3/4 in. diameter, averaging 3/4 ins. from cr. to cr.Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3/4 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 half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.Breadth of laps of plating in double riveting 1/2 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 Screw Bolts & Nuts (Explain by Sketch, if necessary.)Beams of the various Decks, how secured to the sides? Welded & Nuts plates No. of Breasthooks, 6 Crutches, 5What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? BestManufacturer's name or trade mark, Angle Iron Co. & Co. & Co.

The above is a correct description.

Builder's Signature, Caird & Co.Surveyor's Signature, E. Morris

Surveyor to Lloyd's Register of British and Foreign Shipping

Flat Keel Plates, breadth and thickness 34 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredPLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges 34 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredof doubling at Bilge, or increased thickness, and length applied 9 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredfm up. part of Bilge to lr. edge of Sh'rstrake 10 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredMain Sheerstrake, breadth and thickness 36 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredof d'bling at Sh'rstrake, & length applied 13 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredfrom Mn. to Spar Dk. Sh'rstrake. 5 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredUp. or Spar Dk Sh'rstrake, brdth & thickness 5 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredButt Straps to outside plating, breadth & thickness 28 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredLengths of Plating 28 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredShifts of Plating, and Stringers 28 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredGunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 28 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredAngle Iron on ditto 32x3 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredTie Plates fore and aft, outside Hatchways 10 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredDiagonal Tie Plates on Beams No. of Pairs, 10 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredPlanksheer material and scantling 32 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredWaterways do. do. 32 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredFlat of Upper Deck do. do. 22 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredHow fastened to Beams 44 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredStringer Plate on ends of Main or Middle Deck 44 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredBeams, breadth and thickness 44 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredIs the Stringer Plate attached to the outside plating? YesAngle Irons on ditto, No. 2 5x32x4 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredTie Plates, outside Hatchways 10 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredDiagonal Tie Plates on Beams, No. of pairs 10 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredWaterways materials and scantlings 32 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredFlat of Upper Deck do. do. 32 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredHow fastened to Beams 44 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredStringer Plates on ends of Lower Deck, Hold or Orlop Beams 28 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredIs the Stringer Plate attached to the outside plating? YesAngle Irons on ditto, No. 2 32x32x8 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredStringer or Tie Plates, outside Hatchways 10 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredFlat of Lower Deck 3 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredCeiling between Decks, thickness and material 22 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredin hold do. 22 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredMain piece of Rudder, diameter at head 54 Inches in Ship. 16ths. in Ship. Inches required 16ths. requireddo. at heel 3 Inches in Ship. 16ths. in Ship. Inches required 16ths. requiredCan the Rudder be unshipped afloat? YesBulkheads No. 4 Thickness of 5/16 in. 5/16Height up to Main DeckHow secured to sides of ship Double frames & broad linersSize of Vertical Angle Irons 3x25x1/16 and distance apart 30 ins.Are the outside Plates doubled two spaces of Frames in length? YesRiveted through plates with 3/4x7/8 in. Rivets, about 1/4 apart.The REVERSED ANGLE IRONS on floors and frames extend from middle line to GunwaleKEELSONS. Are the various lengths of Plates and Angle Irons properly connected? YesPLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter; averaging 5 ins. from centre to centre.Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3/4 ins. from centre to centre.Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3/4 ins. from centre to centre.Butts of three Strakes at Bilge for half 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 3/4 in. diameter, averaging 3/4 ins. from cr. to cr.Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3/4 ins. from cr. to cr.

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Builder's Signature, Caird & Co.Surveyor's Signature, E. Morris

Surveyor to Lloyd's Register of British and Foreign Shipping

IRON 462-0072



Workmanship. Are the butts of plating planed or otherwise fitted? Planed  
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? Very few

Masts, Bowsprit, Yards, &c., are Iron & Steel in good 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 Fore Mast 49 ft dia 21. Main Mast 43 ft dia 21 - Pole Masts.

Masts in two plates 6/16 edges double riveted, butts treble, plates doubled in way of wedging.  
Topmasts in two plates 5/16

Fore Yard of Steel 57 ft long 13 1/2 in dia. in two plates 3/16 1/2 1/4 edges single riveted and butts double.

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wt req'd per Rule.	Test req'd per Rule.
SAILS.							Bowers	2483	22.0.26	22.11.1.0	21.0.0	21.0.0
N <sup>o</sup> .	CABLES, &c.							2484	21.2.0	22.0.0.0	21.0.0	21.0.0
Fore Sails,	29 1/4 Chain	120	1 1/2	40 20 x 58 20	1 1/2	40 20 x 58 20		2482	18.0.0	19.0.0.0	14.3.11	18 5/8
Fore Top Sails,	Chester Roving House - Andrew S. Jack											
Fore Topmast Stay Sails,	Super Strm Cbl	90	1 1/2									
Main Sails,	Hawser ...	90	1 1/2									
Main Top Sails,	Towlines ...	90	5									
and spare sails	Warp ...	90	4 1/2									
	quality good	90	3 1/2									

Standing and Running Riggings Wire & Hempen sufficient in size and good in quality. She has one Long Boat and two Life Boats.

The Windlass is Harfield's Patent Capstan 2 Winches and Rudder Efficient Pumps one in each compartment.

Engine Room Skylights. How constructed? Iron & Glass How secured in ordinary weather? Quadrants & Wire Coating

What arrangements for deadlights in bad weather? Tarpaulins

Coal Bunker Openings. How constructed? One on each side How are lids secured? as per sketch appended herewith Height above deck?

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Ports & Scuppers at Main Deck

Cargo Hatchways. How formed? Iron & Glass

State size Main Hatch 10' 0" x 9' 0" Fore hatch 6' 0" x 6' 0" Quarter hatch 9' 0" x 8' 0"

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams?

Hatches, If strong and efficient? Yes

Order for Special Survey No. 724

Date 23 October 1874

Order for Ordinary Survey No. 193

Date ✓

No. 193 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. Built under S.S. and surveyed 1844 - November 28,

2nd. On the plating during the process of riveting. December 1, 16, 26, 31, 1845 - January 11, 16, 22, 24, 29, February 2, 4, 9,

3rd. When the beams were in and fastened, and before the decks were laid. 5, 20, 23, March 3, 9, 13, 16, 23, 31, April 2, 5, 8, 14, 16, 22, 24, 29, May 15, 14,

4th. When the ship was complete, and before the plating was finally coated or cemented. 22, 25, 29, June 3, 5, 9, 10, 12, 15, 14, 19.

5th. After the ship was launched and equipped.

General Remarks (State quality of workmanship, &c.) This Vessel is schooner rigged, and has a Shade Deck extending all

fore and aft with a Poop 51 ft and Forecastle 42 ft in length and Bridge House amidships. The Shade Deck is

supported by the alternate frames being carried up to the Shade Deck Stringer stem at the sides and fitted

with Iron portable Spray Shutters of 18" plate, hinged at upper part and secured by hand Bolts below.

This Vessel has been built in conformity with the Rules for 1844 and midship section herewith appended

which was submitted and approved by the Committee in letter dated 3<sup>rd</sup> November 1844. - In way of Engine

and Boiler space two Deck Beams are fitted of extra strength viz 4" see Built in on as shown in sketch

appended and required by the Committee in letter dated 15<sup>th</sup> December 1844. The arrangements in respect to Coal

Ports were approved by the Committee in letter dated 22<sup>nd</sup> February 1845, these have been fitted as shown in red

ink on the sketch attached hereto. The Committee in letter dated 22<sup>nd</sup> April 1845 sanctioned the maximum load

line submitted by the Owners for this Vessel viz 15 ft 6 ins as noted on accompanying midship section and longitudinal

inial plan. - The scantlings approved for this Vessel with the general arrangements above referred to have been

adhered to, with the exception of the Coal Ports which have been so fitted as to retain more of the Stringer

plate with additional strength; in other respects the Rules have been satisfactorily complied with, and the workmanship

and materials are of the best description. -

State if one, two, or three decked vessel, or if single decked; and the lengths of poop, forecastle, 51 ft raised quarter deck, and the length of double, or part double bottom 42 ft

How are the surfaces preserved from oxidation? Inside Portland Cement to above Belges Red Lead Outside Red Lead & Paint

I am of opinion this Vessel should be Classed 100 A 1.

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, Edmund Borchman

Special ... £ 39 : 14 : 0 14 June 1875

Certificate ... £ 0 : 0 : 0

(Travelling Expenses, if any, £ 44 : 14 : 0)

Committee's Minute 22<sup>nd</sup> June 1875

Character assigned 100 A 1

2 Dps & Shade Dk

Longitudinal

15 feet

100 A 1

100 A 1

100 A 1

100 A 1