IRON SHIP.

(Received at London Office THURSD 28 AUGUST 1884

No. 13,502 Survey held at Sunderland Date, First Survey April 3rd 1884 Last Survey August 20th 18 84

On the Iron Screw Steamer "CORTES" Yard No. 299.

TONNAGE under Tonnage Deck	1248·97
Ditto of ~~Shelter, Spar, or Awning Deck~~ Hatchways	5·14
Ditto of Poop, or Raised Qr. Dk.	
Ditto of Houses on Deck	7·09
Ditto of Forecastle	
Gross Tonnage	1261·20
Less Crew Space	49·14
	1212·06
Less Engine Room	234·36
Register Tonnage as cut on Beam	977·70

~~ONE, OR TWO DECKED, THREE DECKED VESSEL,~~ SPAR, ~~OR AWNING~~-DECKED VESSEL.

	Feet.
Half Breadth (moulded)	16·00
Depth from upper part of Keel to top of Upper Deck Beams	15·42
Girth of Half Midship Frame (as per Rule)	28·00
1st Number	59·42
1st Number, if a **3-Decked Vessel** .. deduct 7 feet	
Length	219·83
2nd Number	13,062
Proportions— Breadths to Length	6·86
Depths to Length— ~~Upper~~ Spar Deck to Keel	9·48
Main Deck ditto	14·25

Master Balda

Built at Sunderland

When built 1884 Launched 5th July 84

By whom built J. Laing Engr.

Owners Mess.rs Roca & Co.

Residence Barcelona

Port belonging to Barcelona

Destined Voyage Hamburg

~~If~~ Surveyed while Building, Afloat, ~~or~~ in Dry Dock.

Deptford Dry Dock.

	Feet.	Inches.		Feet.	Inches.		Feet.	Inches.		Horse.
LENGTH on deck as per Rule	219	10	**BREADTH**— Moulded	32	0	**DEPTH** top of Floors to Upper Deck Beams / Do. do. Main Deck Beams	21 / 13	8½ / 11½	Power of Engines	95

N°. of Decks with flat laid Two

N°. of Tiers of Beams Two.

Dimensions of Ship per Register, length 228·0 breadth 32·4 depth, 21·6 DEPTH Moulded — Depth Mou.d 13·0¼ to Main Dk — 22·8¼ to Spar Dk

	Inches in Ship.			Inches per Rule.		
KEEL, depth and thickness	8 × 2⅜			8 × 2⅜		
STEM, moulding and thickness	7 × 2⅜			7 × 2⅜		
STERN-POST for Rudder do. do.	7 × 4¾			7 × 4¾		
" " for Propeller	7 × 4¾			7 × 4¾		
Distance of Frames from moulding edge to moulding edge, all fore and aft	22"			22"		
				(Class 100 A.)		
	Inches. In Ship.	Inches. In Ship.	16ths. In Ship	Inches per Rule	Inches per Rule	16ths per Rule
FRAMES, Angle Iron, for ⅗ length amidships	3½	3	7	3½	3	7
Do. for ⅕ at each end	3½	3	6	3½	3	6
REVERSED FRAMES, Angle Iron	3	2½	6	3	2½	6
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships		17½	7		17½	7
" thickness at the ends of vessel			6			6
" depth at ¾ the half-bdth. as per Rule		9			8¾	
" height extended at the Bilges		35			35	
BEAMS, ~~Upper~~, Spar, ~~or Awning~~ Deck Single ~~or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron		6½	6		6½	6
~~Single or~~ double Angle Iron on Upper edge		2¾ 2¾	5		2¾ 2¾	5
Average space		44"			44"	
BEAMS, Main, ~~or Middle Deck~~ Single ~~or d'ble~~ Ang. Iron, ~~Plate or Tee Bulb Iron~~		5½ × 3 × 8			5½ 3	8
~~Single, or double Angle Iron, on Upper Edge~~						
Average space		22"			22"	
BEAMS, Lower Deck— Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
BEAMS, Hold, or Orlop— Single or d'ble Ang. Iron, Plate or Tee Bulb Iron						
Single or double Angle Iron on Upper Edge						
Average space						
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates		13	10		13	10
" Rider Plate		10	10		10	10
" Bulb Plate to Intercostal Keelson						
" Angle Irons	4½	3½	7	4½	3½	7
" Double Angle Iron Side Keelson	4½	3½	7	4½	3½	7
" Side Intercostal Plate			7			7
" ~~do. Angle Irons~~						
" Attached to outside plating with angle iron	3	3	7	3	3	7
BILGE Angle Irons	4½	3½	7	4½	3½	7
" do. Bulb Iron for 3/5 length		7½	7		7½	7
" ~~do. Intercostal plates riveted to plating for length~~						
BILGE STRINGER Angle Irons	4½	3½	7	4½	3½	7
Intercostal plates riveted to plating for half length		18	7		18	7
SIDE STRINGER Angle Irons	4½	3½	7	4½	3½	7

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule	16ths. per Rule
~~Flat Keel Plates, breadth and thickness~~				
PLATES in Garboard Strakes, br'dth & thickness	32	10	32	10
" From Garboard to upper part of Bilges	9 × 8	alter.	9 × 8	alter.
" ~~Of d'bling at Bilge, or increased thickness, and length applied~~				
" From up. prt of Bilge to lr. edge of Sh'rstrake	9 × 8	alter.	9 8 8	alter.
" Main Sheerstrake, breadth and thickness	36	10	36	10
" Of d'blng at Sh'stk. & lng. applied 3/5 length	18	8	18	8
" From M'n. to Upr. or Spar Dk. Sh'rstrake		8		7
" Up. or Spar Dk Sh'rstrake, brdth & thickn'ss	36	8	36	8
Butt Straps to outside plating, breadth & thickness	9¾	14 to 8 to 10	9¾	14 to 8 to 10
Lengths of Plating	Six frame spaces.			
Shifts of Plating, and Stringers	Two and three frame spaces			
Gunwale Plate on ends of ~~Awning~~, Spar, ~~or Upper~~ Deck Beams, breadth and thickness	48	8	48	8
Angle Iron on ditto	3½ × 3½ × 7		3½ × 3½ × 7	
Tie Plates fore and aft, outside Hatchways	10	8	10	8
Diagonal Tie Plates on Beams No. of Pairs				
Flat of Up., Spar, or Awning Dk.* Wood	3½		3½	
How fastened to Beams	Screw bolts.			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	48	10	48	10
Is the Stringer Plate attached to the outside plating?	Yes.			
Angle Irons on ditto, No. Two	3½ × 3½ × 7/16		3½ × 3½ × 7/16	
~~Tie Plates, outside Hatchways~~				
~~Diagonal Tie Plates on Beams, No. of pairs~~				
Flat of Middle Deck* do. do. Iron		6		6
How fastened to Beams	Rivets.			
~~Stringer Plates on ends of Lower Deck, Hold or Orlop Beams~~				
~~*Is the Stringer Plate attached to the outside plating?*~~				
~~Angle Irons on ditto, No.~~				
~~Stringer or Tie Plates, outside Hatchways~~				
~~Flat of Lower Deck*~~				
Ceiling betwixt Decks, thickness and material	2			
" in hold do. do.	2 Red Pine		2½	
Main piece of Rudder, diameter at head	5½		5	
do. at heel	3		3	
Can the Rudder be unshipped afloat? Yes				
Bulkheads No. 4 W.T No. per Rule 4 W.T.				
" Thickness of 5/16.				
" Height up Two to Spar Dk and two to Main Dk Flat thence to Spar Dk.				
" How secured to sides of ship between double frames				
" Size of Vertical Angle Irons 3 × 2½ × 7/16 and distance apart 30 ins.				
" Are the outside Plates doubled two spaces of Frames in length? Yes				

* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

Intercostal plate 18 × 7/16 full length of Ships with brackets under every 3rd frame.

The **FRAMES** extend in one length from Centre line to Spar Dk Stringer. Riveted through plates with ¾ in. Rivets, about 6 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Main deck and to Spar deck alternately

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

PLATING. Garboard, double riveted to Keel, with rivets 1⅛ in. diameter, averaging 5 5/8 ins. from centre to centre.

" **Edges of Garboards** and to upper part of Bilge, worked clencher, double riveted; with rivets ¾ in. diameter, averaging 3⅛ ins. from centre to centre.

" **Butts from Keel to turn of Bilge,** worked carvel, double riveted; with rivets ¾ in. diameter averaging 3 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 ¾ in. diameter, averaging 3⅛ ins. from cr. to cr.

" **Butts from Bilge to Main Sheerstrake,** worked carvel, double riveted; with rivets ¾ in. diameter, averaging 3 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.~~ double riveted, plates doubled for 3/5 length. Butts of ~~Upper or~~ Spar Sheerstrake, treble riveted half length amidships.

" **Butts of Main Stringer Plate,** treble riveted for half length amidships. **Butts of ~~Upper or~~ Spar Stringer Plate,** treble riveted for half length.

" Breadth of laps of plating in double riveting 4½ + 5¼. Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble + double. No. of Breasthooks, four Crutches, three

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

Manufacturer's name or trade mark, Angles & Bulbs Lyzack & Co. & South Stockton Iron Co. Forgings C. H. Reed & Co. Sunderland

The above is a correct description.

Builder's Signature, James Laing *Surveyor's Signature,* W. Ormiston

Surveyor to Lloyd's Register of British and Foreign Shipping.

(Form No. 1 for Iron Ships—4000—16/11/82.)

ROBERT EDMUND TAYLOR & SON Commercial and General Steam Printers, 19, Old Street, Goswell Road, E.C., London.

2820 - 649475

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

Do the edges of the carvel work and of the butts fay 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? A few.

Masts, Bowsprit, Yards, &c., are Iron & Wood 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 71 ft long, 19" diam, 6/16 to 5/16 in thickness. Main Mast 74 ft long, 19" diam 6/16 to 5/16 in thickness. There are two plates in the round, seams lapped and double riveted, butts treble riveted above partner double below, doubled in way of wedging. Makers of Mast Iron Consett Iron Co

NUMBER for EQUIPMENT 16449 N.

SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntdt.
No.	Chain ..... (*State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.*)	240	1½	40 5/10 58 7/10	240. 1½	25th July 184
Fore Sails,		Tested at R.N.C.P.T by J. Hartness				
Fore Top Sails,	Iron Stream Chain or Steel Wire ..	75	15/16	15 8/10 23 7/10	75. 15/16	25th July 184
Fore Topmast Stay Sails,	or Hempen Strm Cable					
	Towline, Hemp. or Steel Wire ..	90	10		90. 10	
Main Sails,	Hawser	90	8		90. 8	
Main Top Sails, and	Warp	90	5½		90 5½	
	quality Good.					

ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntdt.
Bower Anchors (*State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.*)	13672	21. 3. 0	22. 3. 3. 0	21. 0. 0	23rd July 18
	13671	21. 2. 0	22. 0. 0. 0	21. 0. 0	" "
	13620	18. 1. 21	19. 8. 3. 0	18. 0. 0	11th July 18
	Tested at R.N.C.P.T by J. Hartness				
Stream Anchor	13677	7. 1. 14	9. 11. 2. 7	7. 1. 0	24th July
Kedge ...	13598	3. 2. 14	6. 0. 3. 21	3. 2. 0	4th "
2nd Kedge ..	13658	1. 3. 7	4. 7. 0. 21	1. 3. 0	19th "

Standing and Running Rigging G.I.N. & Hemp sufficient in size and good in quality. She has two Long Boats and one other

The Windlass is Mansfield's Patent Steam Capstan — and Rudder Good Pumps Good.

Engine Room Skylights.—How constructed? Wood. How secured in ordinary weather? Hand screws.

What arrangements for deadlights in bad weather? thick glass covered with brass grating

Coal Bunker Openings.—How constructed? Iron How are lids secured? Nuts Height above deck? Flush.

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Five scuppers on each side open hand rail stanchions.

Cargo Hatchways.—How formed? Plates and angles in the usual manner

State size **Main Hatch** 25-8 × 10. 0 Forehatch 11. 0 × 10. 0. Quarterhatch 25-8 × 12. 0.

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? Main hatchway one web plate and two shifting beams, Quarter ha

Hatches, If strong and efficient? Solid 2½ { two web-plate beams wood fore

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Order for Special Survey No. 3267

Date 12th May 1884

Order for Ordinary Survey No.

Date

No. 299 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 1884 April 28.

2nd. On the plating during the process of riveting } 16 19 22 25 May 13 14 13 15 19 22 24 26 30 June 5 10 13 18 21 24 26

3rd. When the beams were in and fastened, and before the decks were laid.... } July 12 15 8 21 23 24 28 29 August 15 4 11 12 15 18 26

4th. When the ship was complete, and before the plating was finally coated or cemented..

5th. After the ship was launched and equipped

State dates of letters respecting this case

General Remarks (State quality of workmanship, &c.) The workmanship throughout is good.

This is a spar decked vessel built in accordance with the plans attached to Sunderland Report, No. 13,481. S.S. "Campeador" which is a duplicate vessel in all respects

She has a complete iron main deck, and the after peak is fitted as a water ballast tank which has been tested as per rule and found satisfactory.

She is fitted with two pairs of web frames in the Engine and Boiler space; the ceiling in the holds made 2" thick (red pine) at the owners request.

A freeboard of 6'. 0" and 5'. 8½" is now marked on the side conformable with Secretary's letter February 21st 1884.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside Cement and paint Outside Paint.

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

The amount of the Entry Fee .....£ 4 : 0 : 0 is received by me, AW

Special .....£ 55 : 6 : 0 26th August 1884 Jm Johnstone

(*to be sent as per margin*). Certificate ... : : Surveyor to Lloyd's Register of British and Foreign Shipping

(*Travelling Expenses, if any,* £ —).

FRIDAY 29 AUGUST 1884

Committee's Minute 18

Character assigned 100 A 1

1 Dr Iron Spar Deck

Surveyors are requested not to write on or below the space for Committee's Minute.)

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