

Spar, Awning or Part Awning Dk.

IRON OR STEEL STEAMER.

(Received at London Office)

SAT. 11 FEB 1893

State if Report is also sent on the Machinery of the Vessel *yes*  
Date of completion of Report *9th Feb. 1893*

Port of *Leith*

No. *7096* Survey held at *Grangemouth* Date, First Survey *6th June 1892* Last Survey *4th February 1893*.

On the *Steel Screw Steamer "Ciudad de Reus"*

Rig *3 masts - Schooner*

TONNAGE under  
Age Deck...  
Do. between Tonnage Dk.  
at 3rd, 4th, Spar or  
Awning Dk.  
Total under Upper Dk. *1886.68*  
Do. of Poop  
Do. of Rais-d'Ar.  
Dk. or Break  
Do. of Bridge House  
Do. of Houses Deck  
Do. of excess Hatchways  
Do. of Fore  
Do. above Crown of  
Engine Room...  
Gross Tonnage *1899.21*  
Less Crew Space *71.27* = *95.86*  
Less above Crown of  
Engine Room...  
Tonnage for Fees... *1803.35*  
Less Engine Room  
Less Navigation Spaces  
Register Tonnage *1210.07*

SPAR, AWNING OR PART AWNING-DECKED VESSEL,  
or a Vessel having a continuous Shade Deck.

CLASS *100 A1 "Spar Dk"*

FEET.

Half Breadth (moulded) *18.00*  
Depth from upper part of keel to top of Main Deck Beams *18.75*  
Girth of Half Midship Frame (as per Rule) *32.80*  
1st Number *69.55*  
Length *258.59*  
2nd Number *17984.93*  
Proportions—Breadths to Length *7.18*  
Depths to Length—Main Deck to top of Keel *13.79*

Master *J. Martorell*

Year of Appointment

(1) As Master in service of  
owner of present vessel:—*1892*  
(2) As Master of this  
vessel:—*1892*

Built at *Grangemouth*

When built *1892* Launched *6th Decr. 1892*

By whom built *Smith, Dryd. Comp.*

Owners *Sociedad La Mutua*

Managers

(Where necessary to be entered in Reg. Book.)

Residence *Barcelona*

Port belonging to *Barcelona*

Destined Voyage *Philadelphia*

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

LENGTH on Deck Feet. Inches. BREADTH—Feet. Inches. DEPTH, top of Floors to Spar or Aw. Dk. Beams Feet. Inches. Power of Horse. No. of Decks with flat laid 2  
as per Rule... 258 7 Moulded. 36 0 Do. do. Main Deck Beams... 17 6 Engines No. of Tiers of Beams 2 x Well frames

Dimensions of Ship per Register, Length *260* breadth *36.25* depth *21.5* Spar or Aw. Dk. Moulded depth, ft. *18* ins. *0* To Main Dk. Round up of } 9 ins.  
Main Deck. Beam, Main Dk }

FORGINGS AND CASTINGS

HEEL, Bar or Side Plates, depth and thickness  
STEM, moulding and thickness  
STERN-POST for Rudder do. do.  
" " for Propeller  
MAIN PIECE of Rudder, diameter at head  
do. at heel  
LODDER, how constructed *Ordinary Has*  
Can the Rudder be unshipped afloat? *yes*

FRAMING.

FRAME Angles, or 7 Bars for 3 length amidships  
Do. for 1 at each end  
Do. in way of Double Bottoms  
Distance of Frames from moulding edge to  
moulding edge, all fore and aft  
REVERSED FRAME Angles  
FLOORS, depth and thickness of Floor Plate  
at mid-line for 3 length amidships  
" in way of Engines and Boilers  
" thickness at the ends of vessel  
" depth at 3 the half-bdth. as per Rule  
" height extended at the Bilges  
FLOORS & BRACKETS, in Cell Dble Bottoms  
Distance apart  
CENTRE GIRDER, in Double bottom, depth  
and thickness  
" Angles, Top Bottom  
SIDE GIRDERS, number and thickness  
" Angles  
BEGIN PLATE, depth (exclusive of flange)  
and thickness  
" Angles  
LOWER BOTTOM PLATING, breadth and  
thickness of Middle Line Strake  
" thickness in Engine and Boiler space  
" Remainder in Holds  
BEAMS, Spar or Awning Deck, Single Angle,  
Bulb Angle, Plate or Tee Bulb  
" Angles on upper edge  
" Average space  
BEAMS, Main Deck, Single Angle, Bulb  
Angle, Plate or Tee Bulb  
" Angles on upper edge  
" Average space  
BEAMS, Lower Deck, Single Angle, Bulb  
Angle, Plate or Tee Bulb  
" Angles on upper edge  
" Average space  
BEAMS, Hold, or Orlop, Plate or Tee Bulb  
" Angles on upper edge  
" Average space  
BEAMS, Poop Deck, Angle, Bulb Angle, Plate  
or Tee Bulb  
" Angles on upper edge  
" Average space  
BEAMS, Bridge Deck, Angle, Bulb Angle,  
Plate, or Tee Bulb  
" Angles on upper edge  
" Average space  
BEAMS, Forecastle Deck, Angle, Bulb Angle,  
Plate or Tee Bulb  
" Angles on upper edge  
" Average space  
PILLARS, In 'tween Decks, Size and Spacing  
" Hold  
WEB FRAMES, In Fore Body, No. and spacing  
br'dth and thickness  
" No. of Side Stringers  
WEB FRAMES, In After Body, No. and spacing  
br'dth and thickness  
" No. of Side Stringers  
" Size of Angles or Tee Bars to Web Frames  
BRACKET PLATES to Stringers between  
Web Frames, depth and thickness

KEELSONS AND STRINGERS.

CENTRE LINE KEELSON, Vertical Plate above  
floors, Through Plate, or Intercoastal Plate  
" Rider Plate  
" Bulb Plate to Intercoastal Keelson  
" Horizontal Plates on Floors  
" Angles  
SIDE KEELSON, Angles  
" Bulb or Plate above floors, for length  
" Intercoastal Plate, for whole practicable length  
" Attached to outside Plating with Angle  
BILGE KEELSON, Angles  
" Bulb or Plate above floors, for 3 length  
" Intercoastal Plate, for length  
" Attached to outside Plating with Angle  
BILGE STRINGER Angles  
" Bulb Plate, for length  
" Intercoastal Plate, for length  
" Attached to outside Plating with Angle  
SIDE STRINGER Angles  
" Bulb or Intercoastal Plate, for len.  
Spar, or Awning Deck Stringer Plates, on  
ends of Beams, breadth and thickness  
" Angle on ditto  
" Tie Plates, fore and aft, outside Hatchways  
" Diagonal Tie Plates on Bms., No. of prs.  
" Flat of Deck, \* Iron or Steel, for whole len.  
" " Wood Material and thickness  
" How fastened to Beams  
Main Deck Stringer Plate, breadth & thickness  
" Angles on ditto, No. 1  
" Tie Plates, outside Hatchways  
" Diagonal Tie Plates on Bms., No. of prs.  
" Flat of Deck, \* Iron or Steel, for whole len.  
" " Wood Material and thickness  
" How fastened to Beams  
Lower Deck Stringer Plates, br'dth & thckn's  
" Angles on ditto, No.  
" Tie Plates, outside Hatchways  
" Flat of Deck, \* Material and thickness  
" How fastened to Beams  
Hold, or Orlop Stringer Plate, br'dth & thckn's  
" Angles on ditto, No.  
" Tie Plates, outside Hatchways  
" Flat of Deck, \* Material and thickness  
" How fastened to Beams  
Poop Deck Stringer Plate, breadth & thickness  
" Angles on ditto  
" Tie Plates  
" Flat of Deck, \* Material and thickness  
Bridge Deck Stringer Plate, br'dth & thickness  
" Angle on ditto  
" Tie Plates  
" Flat of Deck, \* Material and thickness  
Forecastle Deck Stringer Plate, br'dth & th'kns  
" Angle on ditto  
" Tie Plates  
" Flat of Deck, \* Material and thickness

PLATING.

FLAT PLATE KEEL, breadth and thickness  
" Dblng or inersd thckn's & len. appl.  
PLATES in Garboard Strakes, breadth & thckns  
from Garboard to lower part of Bilges  
" Bilges, No. of Strakes and thickness  
" Of doubling at Bilge, or increased thickness,  
and length applied 1 strake 50 for 51  
" from up. part of Bilge to l. edge of Sh'rstrake  
Main Sheerstrake, breadth and thickness  
" Of doubling at Sh'rstk. & lng. applied  
from Main to Spar Dk. or Aw. Dk. Sh'rstk  
Spar or Aw. Dk. Sh'rstk, br'dth & thckn's  
Poop sides  
Bridge sides  
Forecastle sides  
Lengths of Plating 8 frame spaces



**BULKHEADS.** No. in Vessel 11 No. Reqd. by Rule 11

	Thickness	Angles	Spacing	Height up	Sngl. or Dbl. Frames
Ceiling betwixt Decks, thickness and material	20	Vrtcl. 6 x 3 x 2	24	10 ft. Deck	Single & Double
" in hold bunkers do. do. <i>Plat. 2 1/2</i>	20	Plat. 2 1/2			
Number of Breasthooks	6	Partitions			
" Crutches	4	Longitudinal			

Are the outside Plates doubled two spaces of Frames in length? *Yes, except oil tank bulkhead*

The **FRAMES** extend in one length from *Middle line to Main St. to Xthence to Spar St.* Riveted through Plates with  $\frac{7}{8}$  in. Rivets, about  $\frac{1}{2}$  apart.

The **REVERSED ANGLE** on floors and frames extend from *middle line to Main & Spar St. alternately.*

**RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.**

**Garboard**, double riveted to *Keel or Flat Plate Keel*, with rivets  $\frac{1}{2}$  in. diameter, averaging  $3\frac{1}{2}$  ins. from centre to centre.

**Edges of Garboards** and to upper part of Bilge, worked clencher, double riveted; with rivets  $\frac{7}{8}$  in. diameter, averaging  $3\frac{1}{2}$  ins. from centre to centre.

**Butts from Keel to turn of Bilge**, worked *carvel, treble or double riveted*, treble for  $\frac{1}{2}$  length, with rivets  $\frac{7}{8}$  in. dia., averaging  $3\frac{1}{2}$  ins. from cr. to cr.

" " " overlapped for *whole* length, treble riveted for *whole* length; with rivets  $\frac{7}{8}$  in. dia., averaging  $3\frac{1}{2}$  ins. from cr. to cr.

**Butts of all Strakes at Bilge** for *whole* length, treble riveted with Butts *overlapped* thicker than the plates they connect.

**Edges from Bilge to Main Sheerstrake**, worked clencher, double *or single* riveted; with rivets  $\frac{7}{8}$  in. diameter, averaging  $3\frac{1}{2}$  ins. from centre to centre.

**Butts from Bilge to Main Sheerstrake**, worked *carvel, treble or double riveted*, treble for  $\frac{1}{2}$  length, with rivets  $\frac{7}{8}$  in. dia., averaging  $3\frac{1}{2}$  ins. from cr. to cr.

" " " overlapped for *whole* length, treble riveted for *whole* length; with rivets  $\frac{7}{8}$  in. dia., averaging  $3\frac{1}{2}$  ins. from cr. to cr.

**Edges of Main Sheerstrake**, double *or single* riveted. **Spar or Aft Sheerstrake**, double *or single* riveted.

**Butts of Main Sheerstrake**, treble riveted for *whole* length amidships. **Butts of Spar or Aft Sheerstrake**, treble riveted *whole* length amidships.

**Butts of Main Stringer Plate**, treble riveted for  $\frac{1}{2}$  length amidships. **Butts of Spar or Aft Stringer Plate**, treble riveted for  $\frac{1}{2}$  length.

" " " overlapped Single or Double Straps for *whole* length amidships. " " " overlapped Single or Double Straps for *whole* length.

**Butts of Inner Bottom Plating** riveted for  $\frac{1}{2}$  length. **Butts of Centre Girder** *Double* riveted.

**Breadth of edge laps of Shell Plating** in double riveting  $6\frac{1}{2} \times 5\frac{1}{2}$ . **Breadth of edge laps of Shell Plating** in single riveting  $10\frac{1}{2} \times 9 \times 12$ .

**Butt Straps of Shell Plating**, breadth and thickness  $16\frac{3}{4} \times \frac{15}{32}$ . **Butts, If Lapped**, breadth of laps  $10\frac{1}{2} \times 9 \times 12$ .

**Butt Straps of Keelsons, Stringer and Tie Plates**, treble or double, riveted *treble & double*.

Manufacturer's name or trade mark of the *Iron or Steel* (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Siemens Martin: Dalzell, Cambuslang, Consett, Stockton, Mossend, Parkhead.*

**Workmanship.** Are the butts of plating planed or otherwise fitted? *All overlapped except Main sheerstrake.*

Is the riveted work properly closed? *Yes*

Are the liners between the frames 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 facing surfaces? *Yes* Do any rivets break into or through the seams or butts of plating? *Yes*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes*

**MASTS, SPARS, &c.** as approved *Plan*

3 pole masts, having fore aft sails only	Material	Total length	DIAMETER AND THICKNESS			No. of Plates in round	ANGLES		RIVETING	
			At Partners	Heel	Head		Number	Size	Seams	Butts
Fore .....	Steel	65	21 1/2 x 2 1/2	20 x 2 1/2	18 x 2 1/2	2	10	10	10	10
Main .....	Do	67 1/2	20 x 2 1/2	20 x 2 1/2	18 x 2 1/2	2	10	10	10	10
Mizen .....	Do	59	20 x 2 1/2	18 x 2 1/2	16 1/2 x 2 1/2	2	10	10	10	10

**Lower Masts.** *Wood*

**Topmasts, Yards and Remainder of Spars** *Wood*

**Rigging, Material and Size, Shrouds** *Steel Wire*

**Sails.** *One Complete* Suit of *Iron or Steel* Sails and the following spare sails

**EQUIPMENT No. 21853. 78 LETTER**

Number of Certificate	Weight, Ex Stock	Weight of Stock	TEST, PER CERTIFICATE			Description of Anchor	Makers	Where and when tested and Superintendent								
			Cwts.	qrs.	lbs.											
15.2.7.2	1st Bower	37	3	18	24	10	0	0	37	2	0	Stockless, Patent anchor, 10 ft. 9 in. 1/2	H. P. Parkes & Co. 1893	1893		
15.2.7.0	2nd "	37	3	18	24	10	0	0	37	2	0	Do	Do	Do		
15.2.7.1	3rd "	31	1	7	20	29	13	0	14	31	3	0	Do	Do	Do	
	4th "															
	Collective weight	107	0	18						106	3	0				
24.4.6.5	Stream	9	3	0	2	11	15	2	14	9	2	0	Common	Do	1893	
24.4.3.0	Kedge	4	3	0	1	0	21	7	2	2	0	4	3	0	Do	Do
24.4.3.2	2nd Kedge	2	2	14	0	2	21	5	2	2	0	4	3	0	Do	Do

**CHAIN CABLES.**

Number of Certificate	Fathoms	Size	Test per Certificate Tons	Weight of Chain Cable	Fathoms & Size Per Rule	Description	Makers of Cables	Where and when tested, and Superintendent	Material	Fathoms	Size	Fathoms & Size Per Rule
10.1.7.9	135	1 1/2	Do	208	2.18	Do	Do	Do	Do	Do	Do	Do
				620.3	11	616.3	Do	Do	Do	Do	Do	Do
Iron Stream Chain	75	1 1/2	33	75	4	Lead link	H. P. Parkes & Co.	1893	Do	Do	Do	Do
Towline (steel wire)	90	2 1/2	26	90	3 1/2	Do	Do	Do	Do	Do	Do	Do

**HAWSERS AND WARPS.**

Number of Certificate	Fathoms	Size	Test per Certificate Tons	Weight of Chain Cable	Fathoms & Size Per Rule	Description	Makers of Cables	Where and when tested, and Superintendent	Material	Fathoms	Size	Fathoms & Size Per Rule
10.1.7.9	135	1 1/2	Do	208	2.18	Do	Do	Do	Do	Do	Do	Do
				620.3	11	616.3	Do	Do	Do	Do	Do	Do
Iron Stream Chain	75	1 1/2	33	75	4	Lead link	H. P. Parkes & Co.	1893	Do	Do	Do	Do
Towline (steel wire)	90	2 1/2	26	90	3 1/2	Do	Do	Do	Do	Do	Do	Do

**Boats** *2 life boats, 1 Cutter & 1 gig.*

**Pumps, Number** *1 hand pump & steam pumps to each tank, hold, &c.* Diameter of Barrel and Tail Pipe  $5 \times 2\frac{1}{2}$

The Windlass is *American Walker & Thompson patent* Capstan

**Engine Room Skylights.** How constructed? *Of oak with bullseyes in cover, bolted to 7 ft. iron casing.*

What arrangements for deadlights in bad weather? *Canvas cover*

**Coal Bunker Openings.** How constructed? *Iron Comings* How are lids secured? *Batten down* Height above deck? *12' above St.*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *On each side 5 scuppers & 1 port*  $\frac{1}{2}$  open bulwarks.

**Cargo Hatchways.** How formed? *Iron Comings* Hatches. If strong and efficient? *Yes*

State size No. 1 Hatch (Forward)  $8\frac{1}{2} \times 7\frac{1}{2}$  No. 2 Hatch  $6\frac{1}{2} \times 4\frac{1}{2}$  No. 3 Hatch  $6\frac{1}{2} \times 4\frac{1}{2}$  No. 4 Hatch  $6\frac{1}{2} \times 4\frac{1}{2}$

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *1 wood fore & after in No. 1 hatchway.*

**Bulwarks**, height above deck and description  $3' 3"$  of  $\frac{3}{8}$  steel or open rail & stanchions Main Rail, material and size *teak*  $6\frac{1}{2} \times 2\frac{1}{2}$

The above is a correct description.

Builder's Signature (here only) *A. J. Miller* Surveyor's Signature *H. Paulsen*

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

Order for Special Survey No. 569 Date *1st July 1892*

Order for Ordinary Survey No. *174* 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 special survey & surveyed: 1892: June 6. 10. 21. 27. 30. July 5. 11. 22. 27. Aug. 2. 8. 11.*

2nd. On the plating during the process of riveting. *15. 17. 19. 26. Sept. 3. 15. 21. 27. Oct. 3. 10. 14. 19. 22. 27.*

3rd. When the beams were in and fastened, and before the decks were laid. *Nov. 1. 5. 9. 15. 21. 24. 26. 29. Dec. 1. 2. 5. 12. 19.*

4th. When the ship was complete, and before the plating was finally coated or cemented. *1893: Jan. 10. 12. 14. 17. 20. 25. Feb. 1. 3. 4.*

5th. After the ship was launched and equipped. *Total No. of Visits 48*

State dates and initials of letters respecting this case *1892: 4. 17. 18. 20. 24. 27. June. 2. 4. 10. 20. 24. July. 19. Aug. 11. 18. 26. 29. 1893: 3. 7. Jan. 6. Feb.*

**General Remarks** (State quality of workmanship, &c.) *Workmanship & Material Good.*

*This vessel is built in accordance with the approved drawing of midship section, forwarded to the Secretary on the 2nd February 1893, and in conformity with the Rules.*

*She is fitted with an installation of electric light by Messrs. Mountain & Co. of Glasgow.*

*The approved drawings of Profile, Transverse Bulkheads, Longitudinal Bulkhead, Stringer & Keelson Brackets, Rigging Plan, Pumping Arrangement and 2 ship Laying Reports are sent herewith.*

**PARTICULARS FOR RECORD in the REGISTER BOOK.**—Length of Poop *ft. R.Q.D. or Break* *ft. Bridge Dk.* *ft. Castle* *ft.*

(in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) *1 BR (Steel) & 1 BR frames and Spar St. (Steel)*

Official No. *1893* ; Signal Letters *1893*

**PARTICULARS OF WATER BALLAST.**

Double bottom, aft, length *ft.* and water capacity in tons *ft.* Double bottom, forward, length *ft.* and water capacity in tons *ft.*

Double bottom, under engines and boilers, length *ft.* and water capacity in tons *ft.* If under Engines only, or Boilers only, state which

Double bottom, constructed on the cellular system, length *ft.* and water capacity in tons *ft.*

Fore peak tank, water capacity in tons *50* After peak tank, water capacity in tons *15*

Midship deep tank, length *ft.* and water capacity in tons *ft.* Other tanks, if fitted, length *ft.* and water capacity in tons *ft.*

The above have *not* been tested as required by the Rules.

(If necessary, furnish further information by sketch.)

How are the surfaces preserved from oxidation? Inside *Partly cemented & Paint* Outside *Paint*

(Portland Cement)

**FREEBOARD** assigned by the Committee, as per Secretary's Letter, dated *3rd January 1893.*

In Summer *4 ft. 11 ins.*

In Winter *5 ft. 2 ins.*

For Winter in North Atlantic *5 ft. 6 ins.*

Fresh Water above the centre of disc *4 ins.*

The amount of Entry Fee *£ 4 : 0 : 0* is received by me, *1893*

Special *£ 70 : 2 : 0* *Jan 11/21 1893*

Certificate *£ 1 : 0 : 0* *Said at Gen. 18/2/93*

Travelling Expenses, if any *£ 1 : 0 : 0*

I am of opinion this Vessel should be Classed *100 A 1 Steel, for St.*

"Carrying Petroleum in Bulk"

Committee's Minute *TUES. 14 FEB 1893*

Character assigned *100 A 1 Steel Spar dk. Carrying petroleum in bulk*

*2 ocl + 2 mcl 2, 93*

*1 BR (Steel) & 1 BR frames + Spar dk (St) + 100 A 1 Steel Spar dk*

*7 K*

*This vessel appears to have been built in accordance with the Rules, and it is submitted that she is eligible for classification as a vessel carrying petroleum in bulk.*

*H. Paulsen*

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