

IRON SHIP.

No. *1756* Survey held at *Woolston* Date, First Survey *1 July* Last Survey *30 Decr 1876*
 On the *Iron Vailing Ship Cambrian Prince* Master *David Davis*
 TONNAGE under Tonnage Deck *1283.36* ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, or Awning Deck. *18.99* SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Poop, or Raised Or. Deck *30.30* HALF BREADTH (moulded) *18.46*
 Ditto of Houses on Deck *1392.65* DEPTH from upper part of Keel to top of Upper Deck Beams *24.96*
 Gross Tonnage *1349.28* GIRTH of Half Midship Frame (as per Rule) *37.87*
 Crew Space *43.37* 1st NUMBER *8229*
 1st NUMBER, if a THREE-DECKED VESSEL *8229*
 LENGTH *214* 2nd NUMBER *17396.0*
 PROPORTIONS—Breadths to Length *Under 6*
 Depths to Length—Upper Deck to Keel *Under 9*
 Main Deck ditto *Under 9*
 Built at *Woolston Southampton*
 When built *1876* Launched *21 Dec*
 By whom built *J.P. Oswald*
 Owners *Messrs William & Robert*
 Port belonging to *Liverpool*
 Destined Voyage *Foreign*
 Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule ...	Feet. 214	Inches.	BREADTH—Moulded...	Feet. 36	Inches. 11	DEPTH top of Floors to Upper Deck Beams Do. to Main Deck Beams	Feet. 22	Inches. 10 1/2	Power of Engines ...	Horse. ✓	Nº. of Decks with flat laid 2nd	Nº. of Tiers of Beams 2nd
Dimensions of Ship per Register, length, 224.75 breadth, 37.12 depth, 22.65												
KEEL, depth and thickness	Inches in Ship. 9 x 2 1/2			Inches per Rule. 9 x 2 1/2			Flat Keel Plates, breadth and thickness ... 38 11.10 36 11					
STEM, moulding and thickness	9 x 2 1/2			8 1/2 x 2 1/2			PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges or doubling at Bridge, or increased thickness, and length applied ... 11.8 10					
STERN-POST for Rudder do. do. for Propeller	9 x 2 1/2			8 1/2 x 2 1/2			fin up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Main. to Upper of Spar Dk. Sh'rstrake. Upper of Spar Dk. Sh'rstrake, breadth & thickness ... 10.8 10					
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 In.			(Class 100A)			Butt Straps to outside plating, breadth & thickness Lengths of Plating ... 41 12.9 40 12					
FRAMES, Angle Iron, for 3/4 length amidships Do. for 1/4 at each end	Inches. In Ship. 5	Inches. In Ship. 3 1/2	16ths. In Ship. 8	Inches. In Ship. 5	Inches. In Ship. 3 1/2	16ths. In Ship. 8	Shifts of Plating, and Stringers ... 11 1/4 12.10 11 3/4 12.10					
REVERSED FRAMES, Angle Iron	5	3 1/2	7	5	3 1/2	7	Gunwale Plate on ends of Keelson, Spar, or Upper Deck Beams, breadth and thickness ... 10 feet 10 feet 4 feet					
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	3 1/2	3 1/2	8	3 1/2	3 1/2	8	Angle Iron on ditto ... 44 10 44 10					
thickness at the ends of vessel	25	10	24 1/2	10	Tie Plates fore and aft, outside Hatchways ... 5 x 4 9.8 5 x 4 9.8							
depth at 3/4 the half-bdth. as per Rule	12 1/2	9.8	50	12 1/2	9.8	50	Diagonal Tie Plates on Beams No. of Pairs, ... 13 10.8 13 10.8					
height extended at the Bilges	8 1/2	8	8	8	8	8	Planksheer material and scantling ... 13 10.8 13 10.8					
BEAMS, Upper, Spar, or Awning Deck Single or 1/2 the Ang. Iron, Plate or 1/2 the Bulb Iron	3	3	7	3	3	7	Waterways do. do. ... 4 14 4 14					
Single or double Angle Iron on Upper edge	48		48				Flat of Upper Deck do. do. ... 4 14 4 14					
Average space							How fastened to Beams Galvanized Nut & Screw bolts					
BEAMS, Main, or Middle Deck Single or 1/2 the Ang. Iron, Plate or 1/2 the Bulb Iron	9	9	9	9	9	9	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... 32 9 32 9					
Single or double Angle Iron on Upper Edge	3 1/2	3	7	3 1/2	3	7	Is the Stringer Plate attached to the outside plating? Yes					
Average space	48		48				Angle Irons on ditto, do. ... 4 x 4 9 4 x 4 9					
BEAMS, Lower Deck, Hold, or Orlop Single or 1/2 the Ang. Iron, Plate or 1/2 the Bulb Iron	17	12	17	12	The Plates, outside Hatchways ... 13 10 13 10							
Single or double Angle Iron on Upper Edge	10 3/4	12	10 3/4	12	Diagonal Tie Plates on Beams, do. of pairs ... 3 2 3 2							
Average space					Waterways materials and soundings ... 3 2 3 2							
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	5	4	9	5	4	9	Flat of Middle Deck do. do. ... 3 2 3 2					
Rider Plate	5	4	9	5	4	9	How fastened to Beams ... 3 2 3 2					
Bulk Plate to Intercostal Keelson	5	4	9	5	4	9	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... 3 2 3 2					
Angle Irons	5	4	9	5	4	9	Is the Stringer Plate attached to the outside plating? Yes					
Double Angle Iron Side Keelson	5	4	9	5	4	9	Angle Irons on ditto, No. ... 4 x 4 9 4 x 4 9					
Side Intercostal Plate	3 1/2	3 1/2	8	3 1/2	3 1/2	8	Stringer or Tie Plates, outside Hatchways ... 13 10 13 10					
do. Angle Irons	3 1/2	3 1/2	8	3 1/2	3 1/2	8	Flat of Lower Deck ... 3 2 3 2					
Attached to outside plating with angle iron	5	4	9	5	4	9	Ceiling betwixt Decks, thickness and material in hold do. do. ... 2 1/2 2 1/2					
BILGE Angle Irons	5	4	9	5	4	9	Main piece of Rudder, diameter at head do. at heel ... 6 6 3 3					
do. Bulk Iron	5	4	9	5	4	9	Can the Rudder be unshipped afloat? Yes					
do. Intercostal plates riveted to plating for length	5	4	9	5	4	9	Bulkheads No. 1 Thickness of 7/16					
BILGE STRINGER Angle Irons	5	4	9	5	4	9	Height up to Upper Deck Beams					
Intercostal plates riveted to plating for length	5	4	9	5	4	9	How secured to sides of ship between double frames					
SIDE STRINGER Angle Irons	5	4	9	5	4	9	Size of Vertical Angle Irons 3 1/2 x 3 1/2 x 5/8 and distance apart 30 ins.					
Transoms, material. Knight-heads. Hawse Timbers. Plate & Ang. Iron	Are the outside Plates doubled two spaces of Frames in length? Yes											
Windlass Iron Patent RAN Bitt												

The FRAMES extend in one length from *Centre Line* to *Gunnwale* Riveted through plates with *1 1/16* in. Rivets, about *7* apart.
 The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *Gunnwale* and to *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 *1 1/16* in. diameter, averaging *5 1/2* ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *1 1/16* in. diameter, averaging *3 3/4* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *1 1/16* in. diameter averaging *3.3 3/4* ins. from centre to centre.
 Butts of *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 *1 1/16* in. diameter, averaging *3.3 3/4* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *1 1/16* in. diameter, averaging *3.3 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 *5 1/4* Breadth of laps of plating in single riveting *5 1/4*
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 Waterway, how secured to Beams *Gutter Cemented* (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? *Edges turned down & riveted to sides*
 That description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Yes*
 Manufacturer's name or trade mark, *Malleable Iron Company*
 The above is a correct description.
 Builder's Signature, *David Davis* Surveyor's Signature, *Edw. J. M. Smith*
 Surveyor to Lloyd's Register of British

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? *a few in the butts*

17555 Iron

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 *Please see sketch Attached*

NUMBER for EQUIPMENT *18555*

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
		Chain	240	1 1/2	59 3/4	240.1 1/2	59 3/4	Bowers	1	32.2.0	30.10.0		
		Stud			82 3/4				1	32.1.14	30.8.0	9 1/4	30 2/20
		Chain							1	27.0.0	27.7.2.0		
		Strm Cbl	90	1									
		Hawser ...	90	9/2		9 1/2							
		Towlines ...	90	6		6							
		Warp	90	5 1/2									
		quality											

Standing and Running Rigging *Mac & Hemp* sufficient in size and *Good* in quality. She has *2 Life Line* Boats and *1 Pk & 1 M Jolly*

The Windlass is *Harford's Patent* Capstan *Good* and Rudder *Good* Pumps *Good*

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? *She is fitted with 4 Scuppers*

4 Ports And 2 Mooring Ports in Bulwarks on each side

Cargo Hatchways.—How formed? *Iron plates And Angle irons in the ordinary manner*

State size Main Hatch *16 feet x 10 feet* Forehatch *6 feet x 5 feet* Quarterhatch *8 feet x 6 feet*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Double Angle irons rivetted together, Ends turned down and secured*

Hatches, &c. strong and efficient? *solid* *3 to Coaming with Nut & Screw bolts*

Order for Special Survey No. *34*

Date *5 Aug 1876*

Order for Ordinary Survey No.

Date

No. *153* 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
- 2nd. On the plating during the process of riveting
- 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 or cemented...
- 5th. After the ship was launched and equipped

At various times while building and fitting out

General Remarks (State quality of workmanship, &c.)

The boatmanship is good, the puncturing Countersinking And rivetting is well done. This vessel has been built under special survey in accordance with the scantlings and arrangements shown in accompanying Approved tracing of Midship Section for Hull, and Approved tracing of Mast and Yards, except that the vessel has been increased in length from 206 to 214 feet and the thickness of the Midship plating extended to 3/5 instead of 1/2 the length amidships since the submitting of the tracing sketch of Midship Section, and in all other respects in accordance with the rules, She has a Moultrey forecabin 21 feet long a house on deck amidships for the accommodation of the crew & 21 feet long and 17 feet wide; and a poop 47 feet long with rounded top

if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

are the surfaces preserved from oxidation? Inside *Cement in Pkgs Paint Above* Outside *Paint & Composition*

of opinion this Vessel should be Classed *100 A 1*

Amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *James W. W.*

Special ... £ 58 : 14 : 6 30 Dec 1876

Certificate ... *required*

any, £ *None*

Minute *5 January* 18 *77*

100 A 1

1876

It is submitted that vessel appears eligible to be classed 100 A 1
Lloyd's Register Foundation