

# IRON SHIP.

No.	Survey held at <u>London</u>	Date, First Survey <u>12 Feb 77</u>	Last Survey <u>22 Sept 1877</u>
On the <u>Four Mast Ship "Cuba"</u>	Yard Number	Master <u>W. H. Bisset</u>	
TONNAGE under Tonnage Deck } <u>2470.42</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Glasgow</u>	
Ditto of Third, Spar, or Awning Deck. }	SPAR, OR AWNING-DECKED VESSEL.	When built <u>1864</u> Launched <u>-</u>	
Ditto of Poop, or Raised Qr. Dk. }	HALF BREADTH (moulded) .. .. .	By whom built <u>John Mc Gregor</u>	
Ditto of Houses on Deck ... }	DEPTH from upper part of Keel to top of Upper Deck Beams	Owners <u>D. Brown</u>	
Ditto of Forecastle	GIRTH of Half Midship Frame (as per Rule)	Port belonging to <u>London</u>	
Gross Tonnage	1st NUMBER	Destined Voyage <u>Melbourne</u>	
Less Crew Space	1st NUMBER, if a THREE-DECKED VESSEL	If Surveyed while Building, Afloat, or in Dry Dock.	
Less Engine Room	deduct 7 feet	Dry dock and afloat.	
Register Tonnage as cut on Beam	LENGTH		
	2nd NUMBER		
	PROPORTIONS—Breaths to Length		
	Depths to Length—Upper Deck to Keel		
	Main Deck ditto		

<b>LENGTH</b> on deck as per Rule ...		Feet.	Inches.	<b>BREADTH</b> Moulded... ..		Feet.	Inches.	<b>DEPTH</b> top of <del>Plank</del> to Upper Deck Beams ..... Do. do. Main Deck Beams.....		Feet.	Inches.	Power of Engines ... ..		Horse.	N <sup>o</sup> . of Decks with flat laid N <sup>o</sup> . of Tiers of Beams	
32 7				42				30 1				✓			Five Three	

Dimensions of Ship per Register, length, 338.2 breadth, 42.4 depth, 27.6

	Inches in Ship.	Inches. In Ship.	16ths. In Ship.	Inches required per Rule	Inches required per Rule	16ths. required per Rule
<b>KEEL</b> , depth and thickness ... ..	13 x 3 1/2			11 x 3		
<b>TEM</b> , moulding and thickness... ..	13 x 3 1/2			11 x 3		
<b>TERN-POST</b> for Rudder do. do. ... ..	15 x 7			11 x 3		
for Propeller ... ..	13 x 7					
Distance of Frames from moulding edge to } moulding edge, all fore and aft ... .. }	18			(Class 100 A)		
<b>FRAMES</b> , Angle Iron, for 3/4 length amidships ...	6	4	16	5	3 1/2	8
Do. for 1/2 at each end ... ..	6	4	8	5	3 1/2	7
<b>REVERSED FRAMES</b> , Angle Iron ... ..	4	3	8	3 1/2	3 1/2	8
<b>FLOORS</b> , depth and thickness of Floor Plate } at mid line for half length amidships ... }	29		10	25		10
thickness at the ends of vessel ... ..	29		8			
depth at 3/4 the half-bdth. as per Rule ...	12			12 1/2		9
height extended at the Bilges... ..	8 1/2	water line	11	9		9
<b>BEAMS</b> , Upper, Spar, or Availing Deck } Single or double Ang. Iron, Plate or Tee Bulb Iron }	8		10	8		9
Single or double Angle Iron on Upper edge ...	3 1/2	3	4	3 1/2	3 1/2	7
Average space... ..	3 ft					
<b>BEAMS</b> , Main or Middle Deck ... ..						
Single or double Ang. Iron, Plate or Tee Bulb Iron }	10		11	10 1/2		10
Single, or double Angle Iron, on Upper Edge ...	4	3	10	8	4	3 1/2
Average space... ..	3 ft					
<b>BEAMS</b> , Lower Deck, Hold or Orlop } Single or double Ang. Iron, Plate or Tee Bulb Iron }	8		11	10		10
Single or double Angle Iron on Upper Edge ...	3 1/2	3	4	3 1/2	3 1/2	7
Average space... ..	see remarks					
<b>KEELSONS</b> Centre line, single or double plate, } box, or Intercoastal, Plates ... }	27		10	3 1/2		9
" Rider Plate ... ..						
" Bulb Plate to Intercoastal Keelson ... ..	14		10			
" Angle Irons ... ..	8	4	10	6 1/2	4	9
" Double Angle Iron Side Keelson ... ..	6	4	10	6 1/2	4	9
" Side Intercoastal Plate ... ..	21		8			
" do. Angle Irons ... ..	6	4	8			
" Attached to outside plating with angle iron	4	4	8			
<b>BILGE</b> Angle Irons ... ..	5	4	8	6 1/2	4	9
" do. Bulb Iron ... ..						
" do. Intercoastal plates riveted to plating for _____ length	12		8			
<b>BILGE STRINGER</b> Angle Irons ... ..						
Intercoastal plates riveted to plating for _____ length.						
<b>SIDE STRINGER</b> Angle Irons ... ..						

	in ship.	in ship.	required	required
Flat Keel Plates, breadth and thickness ...	✓			
<b>PLATES</b> in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ...	24	16 14 13	36	12
fm up. part of Bilge to lr. edge of Sh'rstrake		throughout.		
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	33	12	40	16
Up. or Spar Dk Sh'rstrake, brdth & thickness	180ft	10 10 1/2 13		
Butt Straps to outside plating, breadth & thickness	1		11 1/4	
Lengths of Plating ...	10 1/2	6"		
Shifts of Plating, and Stringers...				
Gunwale Plate on ends of <del>Awning Spar, or</del> Upper Deck Beams, breadth and thickness...	66	10	72	9
Angle Iron on ditto ...	5 x 4 x 5/8		6 1/2 x 4 x 9	
Tie Plates fore and aft, outside Hatchways	24	10	18.	10
Diagonal Tie Plates on Beams No. of Pairs,				
Planksheer material and scantling		Seal		
Waterways do. do.		Seal		
Flat of Upper Deck do. do.		Seal 3 1/2		
How fastened to Beams		Bolts with head & screw		
Stringer Plate on ends of Main or Middle Deck } Beams, breadth and thickness	36	10	72	10
Is the Stringer Plate attached to the outside plating?	524	8	636	8
Angle Irons on ditto, No. <u>pub</u> ...	20	5 x 4 x 5/8	6 1/2 x 4 x 9	
Tie Plates, outside Hatchways ...	24	9	18	10
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.		20 P. 3 1/2		
How fastened to Beams		with a screw bolts		
Stringer Plates on ends of Lower Deck, Hold or } Orlop Beams	24	9	46	9
Is the Stringer Plate attached to the outside plating?	no		36	8
Angle Irons on ditto, No. <u>one</u> ...				
Stringer or Tie Plates, outside Hatchways	✓			
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material in hold do. do.		2 1/2 battens		
Main piece of Rudder, diameter at head do. do.	2 1/2 P. P.		2 1/2	
do. at heel	5 1/8		8	
Can the Rudder be unshipped afloat?	4		4	
Bulkheads No. <u>5</u> Thickness of <u>8/16</u>				
Height up <u>upper deck</u>				
How secured to sides of ship <u>by double frames</u>				
Size of Vertical Angle Irons <u>4 1/2 x 3 1/2 x 1/2</u> and distance apart <u>30</u> ins.				
Are the outside Plates doubled two spaces of Frames in length?				

Transoms, material. Knight-heads. Hawse Timbers. Iron  
*Capelan*  
 Windlass Iron Patent Pall Bitt ✓

The **FRAMES** extend in one length from 1 Keel to gunwale Riveted through plates with \_\_\_\_\_ in. Rivets, about \_\_\_\_\_ apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to The Union and Upper 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  $\frac{1}{4}$  in. diameter, averaging \_\_\_\_\_ 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  $2\frac{1}{2}$  ins. from centre to centre.

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

Butts from Bulge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 8/16 ins. from cr. to cr.  
 Edges of Main Sheerstrake, double or single riveted. Inner Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, <sup>double</sup> riveted for <sup>full</sup> length amidships. Butts of Upper or Spar Sheerstrake, <sup>double</sup> riveted, <sup>full</sup> length amidships.

Butts of Main Stringer Plate, ~~double~~ riveted for ~~entire~~ length amidships. Butts of Upper or Spar Stringer Plate, ~~double~~ riveted for ~~entire~~ length.

Breadth of laps of plating in double riveting 5 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? See headship section No. of Breasthooks, 5 Crutches, 6

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,

Mrs. Congdon  
 J. S. Clelland  
 Wm. H. D. ...

RON 473-0515



Workmanship. Are the butts of plating planed or otherwise fitted? *appears to be well 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? *Yes where*  
Are the fillings between the ribs and plates solid single pieces? *Solid*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes as far as can be seen*  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *appears to be well countersunk*  
Do any rivets break into or through the seams or butts of the plating? *not any seen*

Masts, Bowsprit, Yards, &c., are *Iron and Steel (new)* 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 *See tracings*

*The after or Sigger Mast is wood. the others are square rigged.*  
*2498 tons* *300 fms Iron Cannon etc., 15 fms Woods.*

NUMBER for EQUIPMENT 31326		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> .	SAILS.	CABLES, &c.					Bowers ...	3	44-1-11 41-3-15 37-1-24	Trotman's anchors	42	
	Fore Sails,	Chain ...					(State Machine where Tested, Date, and name of Superintendent.)					
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)										
	Fore Topmast Stay Sails	Hawser ...	100	1 1/2	90-1 1/2							
	Main Sails,	Towlines ...	120	4 1/2	90-12		Stream ...	1	20-0-26 1/2	with Stocks	17	
	Main Top Sails,	Warp ...	90	1 1/2	90-12		Kedges ...	2	10-1-0 6-1-0		8 1/2 4 1/4	
	Standing and Running Rigging	quality	90	8	90-8							

*See sketch of the ship*  
*and rigging Steel wire*  
The Windlass is *Iron Patent* Capstan *Iron* and Rudder *and* Pumps *good (new) 2 Main, 2 bilge one down below.*  
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? *Openings in Bulwarks*

Cargo Hatchways. How formed? *properly framed*  
State size Main Hatch *18 1/2 x 9 1/2* Forehatch *14 1/2 x 8 1/2* Quarterhatch *10 x 10 x 7 1/2*  
If of extraordinary size, state how framed and secured? *Good*  
What arrangement for shifting beams? *Good*  
Hatches, If strong and efficient? *Yes*

Order for Special Survey No.	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	✓
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, (State quality of workmanship &c.) *This vessel has been converted from a Screw Steamer into a sailing ship with 4 masts. And she has been specially surveyed under the Rules S.S. No. 3. This case has previously occupied the attention of the Committee, and their requirements as per Sect 42 letter of the 23rd March 1874, to the Surveyors, have been carried out. Four *under* *9 x 3 1/2* beams have been introduced in the main hold, at the lower deck, making a total of six beams. A considerable portion of the deck upper deck has been renewed with *teak*. One strake of plating above the bilges on both sides has been doubled, or about 9 1/2 x 6 in length to cover unsatisfactory butts of plating, and to compensate for other butts in adjoining strakes. The space between the two stern ports plated over and the shaft hole plugged and plated over. The masts, and Bowsprit of Iron (fourth mast excepted), and Yards of Steel, they have been made in accordance with the accompanying tracings which have been approved by the Committee as per letter to Surveyors dated 13 Feb 1877. And in addition the masts and Bowsprit have Steel angle *Iron 4 x 4 1/2* inside. The standing rigging is Steel, shrouds 4 x 2 and lanyards 6 x 2, and which has been sanctioned by the Committee. The shell plating has been drilled in several places and found to correspond nearly with Induship Section. All the Ceiling has been removed and the both surfaces of plating, frames &c. shipped a beaten throughout. Pl. Cemented from end to end. Cables ranged on deck, found free from rusting, of the best manufacture certificate of *Leas* as appended, from which were admitted by the Committee prior to 1873. We therefore respectfully submit the same for favorable consideration. *with a new 100 A1 class*  
State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, fore-castle or raised quarter deck, or of double or part double bottom.*

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

*See* I am of opinion this Vessel should be Classed *100 A1*

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

*24/6/77* Special ... £ 52 : 10 : } *25th Sep 1877* H. J. S.  
Certificate ... - : 5 :

(Travelling Expenses)  
(if any) £

Committee's Minute *24th September, 1877.*

Character assigned *100 A1*

*S.S. No. 3. 7 1/2*

*Thomas Congdon*  
*J. W. Seccombe*  
*W. L. B. Carey*

*Lloyd's Register*  
*Foundation*