

IRON SHIP.

Rev 19/6/73

No. 3668 Survey held at Paisley Date, First Survey 24th Dec 72 Last Survey 18th June 73
On the "S. S. Grimanega" Yard Number 18 Master Jay

TONNAGE under Tonnage Deck } <u>116.83</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Paisley</u>
Ditto of Third, Spar, or Awning Deck. } <u>21.71</u>	SPAR, OR AWNING DECKED VESSEL.	When built <u>1873</u> Launched <u>May 1873</u>
Ditto of Poop, or Raised Qr. Dk. } <u>1.30</u>	HALF BREADTH (moulded) <u>9.34</u>	By whom built <u>Fullerton & Co</u>
Ditto of Houses on Deck <u>1.30</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>9.43</u>	Owners <u>M. Cotes</u>
Ditto of Forecastle <u>1.30</u>	GIRTH of Half Midship Frame (as per Rule) <u>16.22</u>	Port belonging to <u>Callao</u>
Gross Tonnage <u>139.84</u>	1st NUMBER <u>34.99</u>	Destined Voyage <u>Glide to Callao</u>
Less Crew Space <u>62.00</u>	1st NUMBER, if a THREE-DECKED VESSEL	<u>and</u>
Less Engine Room <u>77.84</u>	deduct 7 feet	<u>Surveyed while Building, Afloat, or in Dry Dock.</u>
Register Tonnage as cut on Beam <u>77.84</u>	LENGTH <u>109.9</u>	
	2nd NUMBER <u>3.845</u>	
	PROPORTIONS —Breadths to Length <u>under 6</u>	
	Depths to Length—Upper Deck to Keel <u>11.6</u>	
	Main Deck ditto	

LENGTH on deck as per Rule 109 **BREADTH**—Moulded 18 **DEPTH** top of Floors to Upper Deck Beams 8 **Power of Engines** 25 **Nº. of Decks with flat laid** One
Dimensions of Ship per Register, length, 109.8 breadth, 18.85 depth, 8.6

KEEL , depth and thickness <u>6 1/2 x 1 1/2</u>	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied <u>one strake one strake</u>
STEM , moulding and thickness <u>6 1/2 x 1 1/2</u>	fm up. part of Bilge to lr. edge of Sh'rstrake
STERN-POST for Rudder do. do. <u>6 x 2 1/2</u>	Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.
for Propeller <u>6 x 2 1/2</u>	Up. or Spar Dk Sh'rstrake, brdth & thickness
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>21</u>	Butt Straps to outside plating, breadth & thickness
	Lengths of Plating <u>10 1/2 feet</u>
FRAMES , Angle Iron, for 3/4 length amidships <u>2 1/2 x 1/2</u>	Shifts of Plating, and Stringers <u>5 1/4</u>
Do. for 1/2 at each end <u>2 1/2 x 1/2</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness <u>22</u>
REVERSED FRAMES , Angle Iron <u>2 1/4 x 1/4</u>	Angle Iron on ditto <u>3.3</u>
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships <u>10 3/4</u>	Tie Plates fore and aft, outside Hatchways <u>7</u>
thickness at the ends of vessel <u>4 1/6</u>	Diagonal Tie Plates on Beams No. of Pairs, <u>none</u>
depth at 3/4 the half-bdth. as per Rule <u>5 1/2</u>	Planksheer material and scantling <u>Iron gutter</u>
height extended at the Bilges <u>twice depth</u>	Waterways do. do. <u>waterway 3" pine</u>
BEAMS , Upper, Spar, or Awning Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <u>5 3 7/16</u>	How fastened to Beams <u>nuts and screws</u>
Single or double Angle Iron on Upper edge <u>42</u>	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness
Average space	In the Stringer Plate attached to the outside plating?
BEAMS , Main or Middle Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <u>9 8/16</u>	Angle Irons on ditto, No.
Single, or double Angle Iron, on Upper Edge	Tie Plates, outside Hatchways
Average space	Diagonal Tie Plates on Beams, No. of pairs
BEAMS , Lower Deck, Hold or Orlop } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <u>4 4 8/16</u>	Waterways materials and scantlings
Single or double Angle Iron on Upper Edge	Flat of Middle Deck do. do.
Average space	How fastened to Beams
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates <u>9 8/16</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams
" Rider Plate <u>6/16</u>	In the Stringer Plate attached to the outside plating?
" Bulb Plate to Intercoastal Keelson <u>4 4 8/16</u>	Angle Irons on ditto, No.
" Angle Irons <u>3 3 6/16</u>	Stringer or Tie Plates, outside Hatchways
" Double Angle Iron Side Keelson	Flat of Lower Deck
" Side Intercoastal Plate	Ceiling betwixt Decks, thickness and material
" do. Angle Irons	in hold do. do.
" Attached to outside plating with angle iron	Main piece of Rudder, diameter at head
BILGE Angle Irons <u>3 3 6/16</u>	do. at heel
" do. Bulb Iron <u>5 5/16</u>	Can the Rudder be unshipped afloat? <u>Yes</u>
" do. Intercoastal plates riveted to plating for length	Bulkheads No. <u>3</u> Thickness of <u>4/16</u>
BILGE STRINGER Angle Irons <u>3 3 6/16</u>	Height up <u>To Deck</u>
Intercoastal plates riveted to plating for length	How secured to sides of ship <u>between double frames</u>
SIDE STRINGER Angle Irons <u>3 3 6/16</u>	Size of Vertical Angle Irons <u>2 1/4, 2 1/4, 4 1/6</u> and distance apart <u>30</u> ins.
Transoms, material. Knight-heads. Hawse Timbers. <u>Iron</u>	Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>
Windlass <u>Greenheart</u> Pall Bitt <u>Greenheart</u>	

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 5/8 in. Rivets, about 5" apart.
The **REVERSED ANGLE IRONS** on floors and frames extend across middle line to Upper Bilge Stringer and to 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 7/8 in. diameter, averaging 4 3/8 ins. from centre to centre.
Edges of Garboards, and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 2 3/4 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 3/4 ins. from centre to centre.
Butts of one Strakes at Bilge for half length, double 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 5/8 in. diameter, averaging 2 3/4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 5/8 in. diameter, averaging 2 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, double riveted for all length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
Butts of Main Stringer Plate, double riveted for all length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length amidships.
Breadth of laps of plating in double riveting 6 times Breadth of laps of plating in single riveting 3 1/2 times

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble and double
Waterway, how secured to Beams Riveted (Explain by Sketch, if necessary)
Beams of the various Decks, how secured to the sides? Knees riveted to frame No. of Breasthooks, 3 Crutches, 3
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? B. Boiler
Manufacturer's name or trade mark, Glasgow Co

The above is a correct description.
Builder's Signature, Builder's name Surveyor's Signature, M. Moverly

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

planed

11484 Em

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

Masts, Bowsprit, Yards, &c., are 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 Schooner Rig. Pitch pine Masts.

Tested at Netherthorpe May 6th 1873
by M. K. Reade.

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NUMBER for EQUIPMENT 4229

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain ...	15	3/4	10 2/20			Bowers ...	277	4.3.7	7.3.3.0	4 1/4	6 12/20
	Fore Top Sails,	(Machine where Tested, date, and name of Superintendent.)	61	3/4	10 2/20	3/4	10 2/20	(Machine where Tested, date, and name of Superintendent.)	290	4.3.6	7.3.3.0		
	Fore Topmast Stay Sails	Hempen Stream Cable	45	3/4	10 2/20			Stream ...	1	1 1/2		1 1/2	
	Main Sails,	Hawser ...	121	6	9 1/16 or 6"	4	4	Kedges ...	1	3/4		3/4	
	Main Top Sails,	Towlines ...											
		Warp ...											
		quality good											

Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has one Life Boat and one other

The Windlass is Good Capstan Good and Rudder Good Pumps Good & Efficient

Engine Room Skylights. How constructed? Iron with Teak Skylight How secured in ordinary weather? Iron bars

What arrangements for deadlights in bad weather? Thick Glass Iron Bulwarks and Paulines

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

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

Cargo Hatchways. How formed? Iron

State size Main Hatch 13-0 x 7-6 Forehatch 7-0 x 5-0 Quarterhatch

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? Shifting Beam in Main Hatch

Hatches, If strong and efficient? Yes

Order for Special Survey No.

Date

Order for Ordinary Survey No.

Date

No. 18 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

Built under Common Survey, and visited on the undermentioned dates
24th Dec^r 1872. 10th March 1873.
3rd April. 9th May. 15th June, and 18th June.

General Remarks,

Has raised Quarter Deck & Monkey Forecastle, and Built in general conformity with the Rules, with a view to Clasp 90 A. In wake of the Breach the side of the vessel is strengthened as required by Sec 45.

State if one, two or three decked vessel, or if spar or acoring decked, and lengths of poop, forecabin or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement & paint Outside Red lead & paint

I am of opinion this Vessel should be Classed 90 A 1.

The amount of the Entry Fee ... £ 2 : : : is received by me,

Special ... £ 3 : 10 :
Certificate ... : 2 : 6

(Travelling Expenses)
(if any) £ 3.14.0

Committee's Minute 20th June, 1873

Character assigned

90 A 1

Accepted Mc TBW

This vessel appears to be classed 90 A 1 as recommended by the Committee of Lloyd's Register Foundation