

IRON SHIP. 1915

No. 11,432 Survey held at *Sunderland* Date, First Survey *January 22nd* Last Survey *August 24th* 18*94*

On the Ship *"Glenaricht"* Master *J. R. Gordon*

ONNAGE under Tonnage Deck *1636 18* ONE, OR TWO DECKED, THREE DECKED VESSEL.

SPAR, OR AWNING DECKED VESSEL.

HALF BREADTH (moulded)... *20 0* Feet.

DEPTH from upper part of Keel to top of Upper Deck Beam... *26 54*

GIRTH of Half Midship Frame (as per Rule)... *41 10*

1st NUMBER... *87 64*

2nd NUMBER... *21 033*

PROPORTIONS—Breadths to Length *Under* *6 1/2*

Depths to Length—Upper Deck to Keel *Under* *9 1/2*

Main Deck ditto... *Under*

Built at *Sunderland*

When built *1877* Launched *1877*

By whom built *Mounsey & Foster*

Owners *Messrs L. H. MacIntyre & Co.*

Port belonging to *Liverpool*

Destined Voyage *Singapore*

Surveyed while Building, Afloat, or in Dry Dock *Under*

LENGTH on deck as per Rule... *240* Feet. Inches. BREADTH—Moulded... *40* Feet. Inches. DEPTH top of Floors to Upper Deck Beams... *24 3* Feet. Inches. Power of Engines... *1* Horse. No. of Decks with flat laid *2* No. of Tiers of Beams *2*

Dimensions of Ship per Register, length, breadth, depth,	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>9 1/2 + 2 1/2</i>	<i>9 1/2 + 2 1/2</i>								
STEM, moulding and thickness	<i>9 + 2 1/2</i>	<i>9 + 2 1/2</i>								
STERN-POST for Rudder do. do.	<i>9 + 2 1/2</i>	<i>9 + 2 1/2</i>								
for Propeller	<i>23"</i>	<i>24"</i>								
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>23"</i>	<i>24"</i>								
FRAMES, Angle Iron, for 1/2 length amidships	<i>5 1/2 3 1/2 8</i>	<i>5 1/2 3 1/2 8</i>								
Do. for 1/4 at each end	<i>5 1/2 3 1/2 7</i>	<i>5 1/2 3 1/2 7</i>								
REVERSED FRAMES, Angle Iron	<i>3 1/2 3 1/2 8</i>	<i>3 1/2 3 1/2 8</i>								
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>28</i>	<i>10</i>	<i>28</i>	<i>10</i>						
thickness at the ends of vessel	<i>12 1/2</i>	<i>9 5/8</i>	<i>12 1/2</i>	<i>9 5/8</i>						
depth at 1/4 the half-bdth. as per Rule	<i>12 1/2</i>	<i>9 5/8</i>	<i>12 1/2</i>	<i>9 5/8</i>						
height extended at the Bilges	<i>Twice</i>	<i>Twice</i>								
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>9 1/2 9</i>	<i>9 1/2 9</i>								
Single or double Angle Iron on Upper edge	<i>3 1/2 3 1/2 7</i>	<i>3 1/2 3 1/2 7</i>								
Average space	<i>46"</i>	<i>48"</i>								
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>9 1/2 9</i>	<i>9 1/2 9</i>								
Single or double Angle Iron, on Upper Edge	<i>3 1/2 3 1/2 7</i>	<i>3 1/2 3 1/2 7</i>								
Average space	<i>46"</i>	<i>48"</i>								
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>9 1/2 9</i>	<i>9 1/2 9</i>								
Single or double Angle Iron on Upper Edge	<i>3 1/2 3 1/2 7</i>	<i>3 1/2 3 1/2 7</i>								
Average space	<i>46"</i>	<i>48"</i>								
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	<i>18</i>	<i>13</i>	<i>18</i>	<i>13</i>						
" Rider Plate	<i>12</i>	<i>13</i>	<i>11 1/2</i>	<i>13</i>						
" Bulb Plate to Intercoastal Keelson	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" Angle Irons	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" Double Angle Iron Side Keelson	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" Side Intercoastal Plate	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" do. Angle Irons	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" Attached to outside plating with angle iron	<i>3 1/2 3 1/2 8</i>	<i>3 1/2 3 1/2 8</i>								
BILGE Angle Irons	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" do. Bulb Iron	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
" do. Intercoastal plates riveted to plating for length	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
BILGE STRINGER Angle Irons	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
Intercoastal plates riveted to plating for 3/5 length	<i>9 1/2</i>	<i>9</i>	<i>9 1/2</i>	<i>9</i>						
SIDE STRINGER Angle Irons	<i>5 1/2</i>	<i>4</i>	<i>9</i>	<i>5 1/2</i>	<i>4</i>	<i>9</i>				
Bulb Plate fore and aft	<i>9 1/2</i>	<i>9</i>	<i>9 1/2</i>	<i>9</i>						
Transoms, material. Knight-heads. Hawse Timbers. Iron	<i>East India Keel 2 1/2"</i>	<i>Pall Bitt</i>	<i>Iron</i>							
Windlass	<i>East India Keel 2 1/2"</i>	<i>Pall Bitt</i>	<i>Iron</i>							

The FRAMES extend in one length from *the middle line* to *gun + Prop + Imperator*

The REVERSED ANGLE IRONS on floors and frames extend from middle line to *Upper Deck Stringer* 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 1/8* 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 *3/4 + 7/8* in. diameter, averaging *3 1/4* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *3/4 + 7/8* in. diameter averaging *3 1/4* ins. from centre to centre.

Butts of *3* Strakes at Bilge for *Half* length, treble riveted with Butt Straps *7/16* thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double *or single riveted*; with rivets *3/4 + 7/8* in. diameter, averaging *3 1/4* to *4* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *3/4 + 7/8* in. diameter, averaging *3 1/4* to *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 *or* length amidships.

Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *or* length.

Breadth of laps of plating in double riveting *6 times* Breadth of laps of plating in single riveting *or*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double *or single* Riveted?

Waterway, how secured to Beams *Further gunwale* (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? *Turned on Beams*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Angels, Hopkins, Gillies & Co.*

Manufacturer's name or trade mark, *Messrs L. C. West & Co. Ltd.* *Plates, Messrs. Brown & Co. Ltd.* *Iron, Messrs. Brown & Co. Ltd.*

The above is a correct description.

Builder's Signature, *Mounsey & Foster* Surveyor's Signature, *W. M. B. MANT*

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

IRON 473-0380

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 only*

19115 Iron

Masts, Bowsprit, Yards, &c., are *all* 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 *Capeer Mutch attached. The plates were made by the Boursfield Iron Company and stamped with Mathus name, and submitted to the several Hot and Cold Tests as required by the Rules, and found to be of very good quality. The Mast and Bowsprit Caps are of solid forged iron*

NUMBER for EQUIPMENT		22435	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.
SAILS.		CABLES, &c.	27 1/2	1 1/8	87 1/2	270 1 1/8	67 1/2	Bowers	1	37.0.21	33.17.37	36 1/2	33 3/4
Fore Sails,		Chain	15' 2 1/2"	1 1/8"	77 1/2"	20 amplitudes proved to be 117 3/4	94 1/2	Stream	1	35.2.7	32.15.32	36 1/2	33 3/4
Fore Top Sails,		Chain	15' 2 1/2"	1 1/8"	77 1/2"	20 amplitudes proved to be 117 3/4	94 1/2	Kedges	1	32.0.0	30.2.2.0	31.0.0	29 1/2
Fore Topmast Stay Sails		Humpn Strm Cbl	30	1 1/8	13"	90.11	126 3/4	Tested at the River Wear Lons 28 th Feb 77 by J Hartness May 24 '30 & June 13 th 77					
Main Sails,		Hawser ...	70	1 1/8	13"	90.11	126 3/4						
Main Top Sails,		Towlines ...	90	10 1/2	6 1/2	90 10 1/2	6 1/2						
and		Warp ...	90	6 1/2	5 1/2	90 6 1/2	5 1/2						

Standing and Running Rigging *Wire + Manilla* sufficient in size and *good* in quality. She has *4* Long Boats and *2* fitted as Life Boats

The Windlass is *Good*. Steam Winch, Capstan *Good* and Rudder *Good* Pumps *2 main + 2 Bilge of Iron*

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? *3 Ports 4 Scuppers 2 Mousing pipes & a side*

Cargo Hatchways. How formed? *Plate and angle iron*

State size Main Hatch *15' 3" x 11' 10"* Fore hatch *6' x 6'* Quarter hatch *7' 8" x 7'*

If of extraordinary size, state how framed and secured? *A plate beam and strong fore and after*

What arrangement for shifting beams? *Riveted to coaming plates*

Hatches, If strong and efficient? *Yes solid 2 1/2" fir*

Order for Special Survey No. <i>2657</i>	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.P. and Surveyed 1877 Jan 22 23 26 Feb 13 5 7									
Date <i>21st Nov 1876</i>		2nd. On the plating during the process of riveting	12.16 27 March 29 4 21 23 29 April 4 10 13 19 24 26 27 May 2 5 8 15 17 19 22 23 25									
Order for Ordinary Survey No. <i>✓</i>		3rd. When the beams were in and fastened, and before the decks were laid...	29 30 June 4 6 12 15 20 24 July 5 10 12 13 14 20 24 25 August 3 13 12 20 22 27									
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..										
No. <i>81</i> in builder's yard.		5th. After the ship was launched and equipped										

General Remarks (State quality of workmanship, &c.) *The workmanship is of good quality and well finished throughout. This vessel has been built under special survey in general conformity with the Rules, and in accordance with the approved midship section attached which was sanctioned by the Surveyor's letter dated the 8th of December 1876. To compensate for the non attachment of the Hold beam, stringer to the shell plating the frames are spaced 25" and a supporting plate 14 inches by 8 1/16 is fitted behind the hold beam stringer angle iron. She has a Prop Top fullant fore-castle and a House on deck for the crew. 3 strakes of plating at the Bilges are 1/16 thicker than required by the rules and the upper deck structural stringer plate, and strakes of plating in way of Hold Beams are also in excess of Rules by 1/16 in thickness and the stringer plate 3" wider than required*

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

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

I am of opinion this Vessel should be Classed *100 A.1*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *HW*

Special ... £ 68 : 7 : 6 *29th August 1877*

Certificate ...

(Travelling Expenses, if any, £ ...)

Committee's Minute *31st August, 1877*

Character assigned *100 A.1*

This vessel has been built in accordance with approved sketch of midship section appended and is submitted as eligible for class 100 A.1 as recommended by the Surveyor.

2 Dec 1877