

IRON SHIP.

Survey held at Gunderland Date, First Survey May 8th 1885 Last Survey September 1885
 On the Iron Screw Steamer Chalkspear (Received at London Office, 13th 28th SEPT 1885)

TONNAGE under Tonnage Deck 1555.25
 Ditto of Third Spar, or Aftening Deck 148.04
 Ditto of Poop, or Raised Qr. Dk. 64.03
 Ditto of Houses on Deck 4.46
 Ditto of Forecastle 39.94
 Gross Tonnage 1919.82
 Less Crew Space 64.61
 Less Engine Room 614.34
 Register Tonnage as cut on Beam 1240.87

ONE, OR TWO-DECKED, THREE DECKED VESSEL,
 SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) 14.89
 Depth from upper part of Keel to top of Upper Deck Beams 21.87
 Girth of Half Midship Frame (as per Rule) 35.86
 1st Number 75.62
 1st Number, if a 3-Decked Vessel deduct 7 feet 75.62
 Length 240
 2nd Number 204.14
 Proportions—Breadths to Length 7.54
 Depths to Length—Upper Deck to Keel 12.34
 Main Deck ditto 12.34

Master A. G. Rainey
 Built at Gunderland
 When built 1885 Launched 13-8-85
 By whom built L. Thompson & Co.
 Owners Glover Bros
 Residence London
 Port belonging to London
 Destined Voyage Port Said
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule 240 Breadth—Moulded 35 9/4 Depth top of Floors to Upper Deck Beams 19 11/16 Do. do. Main Deck Beams 19 11/16 Power of Engines 160 Horse. No. of Decks with flat laid 2 No. of Tiers of Beams 2

KEEL, depth and thickness 24 x 2 1/2 inches in ship, 9 1/2 x 2 1/2 inches per Rule.
 STEM, moulding and thickness 24 x 2 1/2 inches in ship, 9 1/2 x 2 1/2 inches per Rule.
 STERN-POST for Rudder do. do. 24 x 2 1/2 inches in ship, 9 1/2 x 2 1/2 inches per Rule.
 " for Propeller 24 x 2 1/2 inches in ship, 9 1/2 x 2 1/2 inches per Rule.
 Distance of Frames from moulding edge to moulding edge, all fore and aft 24 inches in ship, 9 1/2 inches per Rule.

FRAMES, Angle Iron, for 1/2 length amidships 5 3/8 x 3 3/8 inches in ship, 5 3/8 x 3 3/8 inches per Rule.
 Do. for 1/4 at each end 5 3/8 x 3 3/8 inches in ship, 5 3/8 x 3 3/8 inches per Rule.
 REVERSED FRAMES, Angle Iron 5 3/8 x 3 3/8 inches in ship, 5 3/8 x 3 3/8 inches per Rule.
 LOOKS, depth and thickness of Floor Plate at mid line for half length amidships 23 1/2 x 1 1/2 inches in ship, 23 1/2 x 1 1/2 inches per Rule.
 thickness at the ends of vessel 11 1/2 x 1 1/2 inches in ship, 11 1/2 x 1 1/2 inches per Rule.
 depth at 3/4 the half-bdth. as per Rule 11 1/2 x 1 1/2 inches in ship, 11 1/2 x 1 1/2 inches per Rule.
 height extended at the Bilges 11 1/2 x 1 1/2 inches in ship, 11 1/2 x 1 1/2 inches per Rule.

BEAMS, Upper, Spar, or Awning Deck 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle of d'ble Ang. Iron, Plate or Tee Bulb Iron 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle or double Angle Iron on Upper edge 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Average space 24 inches in ship, 24 inches per Rule.
 BEAMS, Main, or Middle Deck 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle of d'ble Ang. Iron, Plate or Tee Bulb Iron 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle, or double Angle Iron, on Upper Edge 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Average space 24 inches in ship, 24 inches per Rule.

BEAMS, Lower Deck 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle of d'ble Ang. Iron, Plate or Tee Bulb Iron 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle or double Angle Iron on Upper Edge 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Average space 24 inches in ship, 24 inches per Rule.
 BEAMS, Hold, or Orlop 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle of d'ble Ang. Iron, Plate or Tee Bulb Iron 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Angle or double Angle Iron on Upper Edge 6 3/8 x 8 inches in ship, 6 3/8 x 8 inches per Rule.
 Average space 24 inches in ship, 24 inches per Rule.

KEELSONS Centre line, single or double plate, box, or intercostal, plates 18 x 13 inches in ship, 18 x 13 inches per Rule.
 Rider Plate 12 x 13 inches in ship, 12 x 13 inches per Rule.
 Bulb Plate to Intercostal Keelson 12 x 13 inches in ship, 12 x 13 inches per Rule.
 Angle Irons 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 Double Angle Iron Side Keelson 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 Side Intercostal Plate 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 do. Angle Irons 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 Attached to outside plating with angle iron 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.

LGE Angle Irons 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 do. Bulb Iron 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 do. Intercostal plates riveted to plating for length 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 LGE STRINGER Angle Irons 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 Intercostal plates riveted to plating for length 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.

DE STRINGER Angle Irons 5 1/2 x 4 inches in ship, 5 1/2 x 4 inches per Rule.
 FRAMES extend in one length from Keel to Gumwale
 REVERSED ANGLE IRONS on floors and frames extend from middle line to upper hold stringer angle and to Upper Deck
 ELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes
 PLATING. Garboard, double riveted to Keel, with rivets 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 7/8 in. diameter, averaging 3 3/8 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/8 ins. from centre to centre.
 Butts of Four Strakes at Bilge for half length, treble riveted with Butt Straps 7/8 in. diameter averaging 3 3/8 ins. from centre to centre.
 Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 3/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/8 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
 Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted
 Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting 5 1/2
 Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & Single
 No. of Breasthooks, Two Crutches, Three
 Manufacturer's name or trade mark, Plates Stockton Malleable Iron Co.
 The above is a correct description.

Owner's Signature, Joseph L. Thompson & Co. Surveyor's Signature, James Williams
 Surveyor to Lloyd's Register of British and Foreign Shipping.
 ROBERT EDMUND TAYLOR & SON Commercial and General Steam Printers, 19, Old Street, Goswell Road, E.C., London.

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 at the butts only*

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. *Please see sketch attached to Old Report, N-13455*
State also Length and Diameter of Lower Masts and Bowsprit. *Examples of the plates of which these masts are constructed have been tested as required by the Rules and found satisfactory*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Supdt.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wt. req'd per Rule.	Machine where Tested & Supdt.	
SAILS.													
N ^o .	CABLES, &c.												
	Chain	242	1 7/8	77 1/2	55 1/2	240-1 7/8	14-8-85	Bower Anchors	4648	30-2-14	29-3-3-0	30-0-0	3-9-85
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)												
	Fore Sails,	146	1 7/8	30 1/2	20 1/2	75-1 7/8	14-7-85		4647	29-3-5	28-11-2-4	30-0-0	3-9-85
	Fore Top Sails,								4646	25-3-9	25-10-1-4	25-2-0	3-9-85
	Fore Topmast Stay Sails,												
	Main Sails,	90	3 1/2	26	90-11	11-11	14-8-85	Stream Anchor	4599	9-2-4	11-13-1-21	9-2-0	14-8-85
	Main Top Sails,	90	3	18	90-9	9-9	14-8-85	Kedge	4594	4-3-21	7-7-2-0	4-3-0	12-8-85
	and	90	7 1/2	Granilla	90-7 1/2	7-1/2	14-8-85	2nd Kedge	4600	2-2-0	5-0-0-0	2-2-0	14-8-85
	quality												
Standing and Running Rigging <i>Iron & Hemp</i> sufficient in size and <i>Good</i> an quality. She has <i>Long</i> Boats and <i>Two</i> others													
The Windlass is <i>Superior Patent Steam</i> Capstan <i>Good</i> and Rudder <i>Good</i> Pumps <i>Good</i>													
Engine Room Skylights. How constructed? <i>Iron</i> How secured in ordinary weather? <i>Hand Screws</i>													
What arrangements for deadlights in bad weather? <i>Iron flaps with bulls eyes</i>													
Coal Bunker Openings. How constructed? <i>Iron</i> How are lids secured? <i>Hatch bars</i> Height above deck? <i>19' 4 1/2"</i>													
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? <i>Scuppers. Ports and Mooring Poles</i>													
Cargo Hatchways. How formed? <i>Iron plates and angles in the usual manner</i>													
State size Main Hatch <i>20'-0" x 12'-0"</i> Forehatch <i>14'-0" x 10'-0"</i> Quarterhatches <i>20'-0" x 12'-0" & 16'-0" x 12'-0"</i>													
If of extraordinary size, state how framed and secured?													
What arrangement for shifting beams? <i>Shifting beam in the fore and the after hatch, a wet plate beam in each of the others; three iron fore and afters in each</i>													
Hatches, If strong and efficient? <i>3' Fir solid</i>													

Order for Special Survey No. *3303* Date *30th May 85*
Order for Ordinary Survey No. *210* Date *10th May 85*
No. *210* in builder's yard.
State dates of letters respecting this case

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
	<i>21st May 85</i>	<i>22nd May 85</i>	<i>23rd May 85</i>	<i>24th May 85</i>	<i>25th May 85</i>

General Remarks (State quality of workmanship, &c.) *The workmanship throughout is good.*
This vessel has been built in accordance with the accompanying photo-prints of Midship Section and Profile, and in general conformity with the Rules for the Class contemplated. She is a sister ship to the Steamer "Raphael" Old Report N-13455.
She is constructed with a double bottom in the Main and After Holds, and the Plates are intended as trimming tanks; the whole of these have been tested with a head of water to the height of the load line and made efficient. The particulars of their dimensions will be found on form attached hereto.
The Foregallant Forecastle, Bridge, Raised Quarter Deck, and Poop are of the following lengths respectively: 30'-0", 68'-0", 68'-0" and 28'-0"

State if one, two, or three decked vessel, or if spar, or coving decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)
How are the surfaces preserved from oxidation? Inside *Cement and Paint* Outside *Paint*
I am of opinion this Vessel should be Classed *100 A1*
The amount of the Entry Fee£ *4 : 0 : 0* is received by me, *J. Williams*
Special£ *71 : 7 : 6* 18th Sept 1885
(to be sent as per margin). Certificate ...
(Travelling Expenses, if any, £)
Committee's Minute
Character assigned *100 A1*
18K (Long) 2th B
TUESDAY 29 SEPT 1885
18
Surveyor to Lloyd's Register of British and Foreign Shipping.
It is submitted that this vessel appears to be classed as recommended.
18K (Long)
2th B
Double Bottom
Grain Hatch
Grain Hatch
Lloyd's Register
Foundation