

IRON SHIP.

Rec 10/24/73

No. 12070 Survey held at St. Shields Date, First Survey 2nd March Last Survey 28th Dec. 1872

On the S.S. "Matthew Bay" Yard Number 86 Master J. Bradley

TONNAGE under Tonnage Deck 961.00
Ditto of Third, Spar, or Awaiting Deck 390.40
Ditto of Poop, or Raised Or. Dk. 3.22
Ditto of Houses on Deck 3.22
Ditto of Forecastle
Gross Tonnage 1354.62
Less Crew Space 51.63
Less Engine Room 433.48
Register Tonnage as out on Beam 269.51

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING DECKED VESSEL.
HALF BREADTH (moulded) Main 15.9
DEPTH from upper part of Keel to top of Upper Deck Beams 19.0
GIRTH of Half Midship Frame (as per Rule) 30.6
1st NUMBER 65.2
1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 240
LENGTH 240
2nd NUMBER 15,648
PROPORTIONS—Breathths to Length 7.6
Depths to Length—Upper Deck to Keel 12.6
Main Deck do.

Built at South Shields
When built 1872 Launched 13th Nov
By whom built Messrs J. Soffley & Co
Owners Hall, Bay & Co
Port belonging to South Shields
Destined Voyage Bombay
Surveyed while Building, Afloat, or in Dry Dock

Official Number 62021

LENGTH on deck as per Rule 240 **BREADTH** Moulded 31 **DEPTH** top of Floors to Upper Deck Beams 17 **Power of Engines** 120 **N^o. of Decks with flat laid** 2 **N^o. of Tiers of Beams** 3

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	16ths required per Rule	16ths required per Rule
KEEL , depth and thickness	$\frac{1}{2} \times 2\frac{1}{2}$	$\frac{1}{2} \times 2\frac{1}{2}$						
STEM , moulding and thickness	$\frac{1}{2} \times 2\frac{1}{2}$	$\frac{1}{2} \times 2\frac{1}{2}$						
STERN-POST for Rudder do. do. for Propeller	$\frac{1}{2} \times 4$	$\frac{1}{2} \times 4$						
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>23</u>	<u>23</u>						
FRAMES , Angle Iron, for $\frac{3}{4}$ length amidships Do. for $\frac{1}{2}$ at each end	4×3	4×3	7×6	7×6				
REVERSED FRAMES , Angle Iron	3×3	3×3	6×3	6×3				
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel	$1\frac{1}{2} \times 8$	$1\frac{1}{2} \times 8$	$1\frac{1}{2} \times 8$	$1\frac{1}{2} \times 8$				
height extended at the Bilges	<u>37</u>	<u>37</u>						
BEAMS , Upper Spar, or Awaiting Deck Single or double Angle Iron, Plate or Tee Bulb Iron	6×6	6×6	6×6	6×6				
Single or double Angle Iron on Upper edge	$2\frac{1}{4} \times 5$	$2\frac{1}{4} \times 5$	$2\frac{1}{4} \times 5$	$2\frac{1}{4} \times 5$				
Average space	<u>46</u>	<u>46</u>						
BEAMS , Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$				
Single or double Angle Iron, on Upper Edge	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$				
Average space	<u>46</u>	<u>46</u>						
BEAMS , Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$				
Single or double Angle Iron on Upper Edge	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$	$3 \times 2\frac{1}{2}$				
Average space	<u>46</u>	<u>46</u>						
KEELSONS Centre line, single or double plate, box or intercostal, Plates	18×11	15×11	15×11	15×11				
Rider Plate	$7\frac{3}{4} \times 9$	$7\frac{3}{4} \times 9$	$7\frac{3}{4} \times 9$	$7\frac{3}{4} \times 9$				
Ball Plate to Intercostal Keelson	$12\frac{1}{2} \times 8$	$12\frac{1}{2} \times 8$	$12\frac{1}{2} \times 8$	$12\frac{1}{2} \times 8$				
Angle Irons	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
Double Angle Iron Side Keelson	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
Side Intercostal Plate	20×8	20×8	20×8	20×8				
do. Angle Irons	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
Attached to outside plating with angle iron	3×7	3×7	3×7	3×7				
BILGE Angle Irons	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
do. Bulb Iron	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$	$7\frac{1}{2} \times 7$				
do. Intercostal plates riveted to plating for length	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
BILGE STRINGER Angle Irons	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
Intercostal plates riveted to plating for length	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
SIDE STRINGER Angle Irons	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$	$5 \times 3\frac{1}{2}$				
Transoms, material. Knight-heads. Hawse Timbers.	<u>iron</u>							
Windlass	<u>non patent</u>							
Pall Bitt	<u>iron</u>							
The FRAMES extend in one length from <u>Keel</u> to <u>gunwale</u> Riveted through plates with $\frac{3}{4}$ in. Rivets, about <u>6</u> apart.								
The REVERSED ANGLE IRONS on floors and frames extend <u>from middle line to Hold beam stringer</u> and to <u>M.D.S.A.T</u> alternately								
KEELSONS . Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And butts properly shifted? <u>Yes</u>								
PLATING . Garboard, double riveted to Keel, with rivets $1\frac{1}{2}$ in. diameter, averaging <u>5</u> ins. from centre to centre.								
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets $\frac{3}{4}$ in. diameter, averaging $3\frac{1}{4}$ ins. from centre to centre.								
Butts from Keel to turn of Bilge , worked carvel, double riveted; with rivets $\frac{3}{4}$ in. diameter averaging <u>3</u> ins. from centre to centre.								
Butts of 3 Strakes at Bilge for $\frac{1}{2}$ length, treble riveted with Butt Straps $\frac{1}{16}$ thicker than the plates they connect.								
Edges from bilge to Main Sheerstrake , worked clencher, double or single riveted; with rivets $\frac{3}{4}$ in. diameter, averaging <u>3</u> ins. from cr. to cr.								
Butts from Bilge to Main Sheerstrake , worked carvel, double riveted; with rivets $\frac{3}{4}$ in. diameter, averaging <u>3</u> 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 $\frac{1}{2}$ length amidships. Butts of Upper or Spar Sheerstrake, treble riveted, length amidships.								
Butts of Main Stringer Plate , treble riveted for $\frac{1}{2}$ length amidships. Butts of Upper Spar Stringer Plate , treble riveted for length.								
Breadth of laps of plating in double riveting $4\frac{1}{2} \times 5\frac{1}{4}$ Breadth of laps of plating in single riveting $2\frac{1}{2}$.								
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>double riveted</u>								
Waterway, how secured to Beams <u>by nuts & screw bolts</u> (Explain by Sketch, if necessary.)								
Beams of the various Decks, how secured to the sides? <u>welded knees riveted</u> No. of Breasthooks, <u>5</u> Crutches, <u>4</u>								
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>frames beams & keelsons from Calver or Co. & Co. & Co. & the plating from Holdfast, & Co. & Co.</u>								
Manufacturer's name or trade mark, <u>from Calver or Co. & Co. & Co. & the plating from Holdfast, & Co. & Co.</u>								
The above is a correct description.								
Builder's Signature, <u>J. Soffley & Co</u> Surveyor's Signature, <u>J. P. Hall</u>								

Workmanship. Are the butts of plating planed or otherwise fitted? planed 11057 Im
 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? solid single pieces
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? fairly so
 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 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

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.											
	CABLES, &c.											
	Chain	300	1 7/8	47.10.0.0	1 7/8	47 1/2	Bowers	3	24.2.0	26.15.0.0	25.2.0	25.3.0.0
	(Machine where Tested, date, and name of Superintendent.)						(Machine where Tested, date, and name of Superintendent.)					
	Fore Sails, <u>Rayds Type</u>											
	Fore Top Sails, <u>Rayds Type</u>											
	Fore Topmast Stay Sails, <u>Hempen Stream</u>	90	1 1/2		1		with <u>stl</u>					
	Main Sails, <u>Rayds Type</u>	90	1 1/2		10		Stream	1	10.3.1		10.2.0	
	Main Top Sails, <u>Rayds Type</u>	90	1 1/2		8		with <u>stl</u>					
	and <u>Warp</u>	100	4				Kedges	2	5.2.1		5.1.0	
	quality <u>good</u>								2.1.0		2.3.0	

Standing and Running Rigging hemp sufficient in size and good in quality. She has 2 1/2 Long Boats and 2 others.
 The Windlass is Iron Patent Capstan good and Rudder good Pumps good & sufficient
Engine Room Skylights.—How constructed? plated with & bulwarks How secured in ordinary weather? rolled down
 What arrangements for deadlights in bad weather? Japan paper
Coal Bunker Openings.—How constructed? oak framed How are lids secured? by iron stops Height above deck? 9"
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? no bulwarks

Cargo Hatchways.—How formed? Iron comings and headledges riveted together.
 State size **Main Hatch** 23.0 x 10.6 **Forehatch** 7.6 x 7.0 **Quarterhatch** 19.0 x 10.6
 If of extraordinary size, state how framed and secured? ordinary
 What arrangement for shifting beams? one of bulb iron & double angles.
Hatches, If strong and efficient? yes

Order for Special Survey No. 890 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought built
 Date 27 Feb 1873 Surveys held 2nd. On the plating during the progress of riveting under
 Order for Ordinary Survey No. — while building 3rd. When the beams were in and fastened, and before the decks were laid special
 Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented survey.
 No. 86 in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks, This is a Spar decked vessel built in accordance with the section attached. She is fitted with a double bottom before and abaft the engine room, top plating 6/16" thick the fore one being 63 feet in length and the after one 61 feet in length.

State, if one, two or three decked vessel, or if spar or awning 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 by Portland cement & paint Outside by paint & composition.
 I am of opinion this Vessel should be Classed 90A.I. part double bottom.

The amount of the Entry Fee ... £ 5 : : is received by me,
 on 1205 tons Special Certificate ... £ 57 : 11 : 6
 (Travelling Expenses) (if any) £ —
 Committee's Minute 11th February 1873.
 Character assigned 90A.I. Spar Deck, part double bottom, U.C. part double bottom.
 J.P.W. A.S.P. U.C. part double bottom
 This record appears the eighth of the class 90A.I. as recommended by the Committee.

11th March 1873. No. 86. Spar decked vessel, part double bottom.

