

IRON SHIP.

No. 10882 Survey held at Sunderland Date, First Survey March 11 1874 Last Survey June 29 1874

On the Sailing Ship Plassey

Yard Number 236

Master Rickaby

TONNAGE under 1583.91

Tonnage Deck 1583.91

Ditto of Third, Spar, or Awaiting Deck 98.13

Ditto of Poop, or Raised Or. Dk. 27.00

Ditto of Houses on Deck 50.51

Gross Tonnage 1764.49

Less Crew Space 81.83

Less Engine Room 168.26

Register Tonnage as cut on Beam 168.26

ONE, OR TWO DECKED, THREE DECKED VESSEL.

SPAR, OR AWNING DECKED VESSEL.

HALF BREADTH (moulded) 19.9

DEPTH from upper part of Keel to top of Upper Deck Beams 25.9

GIRTH of Half Midship Frame (as per Rule) 39.9

1st NUMBER 85.7

1st NUMBER of a THREE-DECKED VESSEL

deduct 7 feet 2460

LENGTH 21.082

2nd NUMBER 21.082

PROPORTIONS—Breadths to Length under 7 ft

Depths to Length—Upper Deck to Keel 11

Main Deck ditto 10 11

Built at Sunderland

When built 1873-4 Launched May 14/76

By whom built Wm. Pile and Co.

Owners J. P. and Co.

Port belonging to London

Destined Voyage Sun^d Calcutta

Surveyed while Building, Afloat, & in Dry Dock.

LENGTH on deck as per Rule 246 Feet. Inches. BREADTH—Moulded... 39 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 25 Feet. Inches. Do. do. Main Deck Beams 25 Feet. Inches. Power of Engines 1 Horse. N^o. of Decks with flat laid Two N^o. of Tiers of Beams Two

Dimensions of Ship per Register, length, 258.5 breadth, 40.1 depth, 23.75

KEEL, depth and thickness 9 1/2 x 2 1/2 Inches in Ship. Inches per Rule. 9 1/2 x 2 1/2
STEM, moulding and thickness 9 x 2 1/2 9 x 2 1/2
STERN-POST for Rudder do. do. 9 x 2 1/2 9 x 2 1/2
for Propeller
Distance of Frames from moulding edge to moulding edge, all fore and aft 24 (Class 100A)

FRAMES, Angle Iron, for 1/2 length amidships 5 3/2 x 8 Inches in Ship. Inches per Rule. 5 3/2 x 8
Do. for 1/4 at each end 5 3/2 x 8 5 3/2 x 8

REVERSED FRAMES, Angle Iron 3 1/2 x 8 3 1/2 x 8

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 25 10 25 10

thickness at the ends of vessel 9 1/2 10 9 1/2 10

depth at 1/4 the half-bdth. as per Rule 12 1/2 10 12 1/2 10

height extended at the Bilges twice the amidship depth

BEAMS, Upper, Spar, or Awaiting Deck 9 1/2 x 9 9 1/2 x 9

Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 3 1/2 x 8 3 1/2 x 8

Single or double Angle Iron on Upper edge 3 1/2 x 8 3 1/2 x 8

Average space attenuates frames

BEAMS, Main or Middle Deck 9 1/2 x 9 9 1/2 x 9

Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 3 1/2 x 8 3 1/2 x 8

Single, or double Angle Iron, on Upper Edge 3 1/2 x 8 3 1/2 x 8

Average space attenuates frames

BEAMS, Lower Deck, Hold or Orlop 9 1/2 x 9 9 1/2 x 9

Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 3 1/2 x 8 3 1/2 x 8

Single or double Angle Iron on Upper Edge 3 1/2 x 8 3 1/2 x 8

Average space attenuates frames

KEELSONS Centre line, single or double plate, 1 1/2 x 13 1 1/2 x 13

Box, or Intercoastal, Plates 9 x 10 9 x 10

Rider Plate 5 1/2 x 4 5 1/2 x 4

Bulb Plate to Intercoastal Keelson 5 1/2 x 4 5 1/2 x 4

Angle Irons 3 1/2 x 8 3 1/2 x 8

Double Angle Iron Side Keelson 3 1/2 x 8 3 1/2 x 8

Side Intercoastal Plate 3 x 3 3 x 3

do. Angle Irons 5 1/2 x 4 5 1/2 x 4

Attached to outside plating with angle iron 5 1/2 x 4 5 1/2 x 4

ILGE Angle Irons 5 1/2 x 4 5 1/2 x 4

do. Bulb Iron 5 1/2 x 4 5 1/2 x 4

do. Intercoastal plates riveted to plating for length 5 1/2 x 4 5 1/2 x 4

ILGE STRINGER Angle Irons 5 1/2 x 4 5 1/2 x 4

Intercoastal plates riveted to plating for length 5 1/2 x 4 5 1/2 x 4

SIDE STRINGER Angle Irons 5 1/2 x 4 5 1/2 x 4

Transoms, material. Knight-heads. Hawse Timbers. Iron

Windlass Iron Patent Pall Bitt Mil

The FRAMES extend in one length from Keel to Gunnwale

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Hold Bⁿ Stringer and to Gunnwale 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 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 7/8 in. diameter averaging 3 1/4 ins. from centre to centre.

Butts of Plating Strakes at Bilge for half length, treble riveted with Butt Straps 7/8 thicker than the plates they connect.

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

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/4 ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted. Double and Single

Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting Nil

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

Waterway, how secured to Beams Gutter Gunnwale (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Ends turned down & Riveted to Gun. No. of Breasthooks, 5 Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. 2 S. Hyack & Co. Stockton

Manufacturer's name or trade mark, Malleable Iron Co. & Hartlepool &c

The above is a correct description.

Builder's Signature, Joseph P. and Co.

Surveyor's Signature, Joseph P. and Co.

Manager & Manager of the Ship

	Inches in Ship.	16ths in Ship.	Inches required	16ths required
Flat Keel Plates, breadth and thickness	36	12	36	12
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	11	—	10 1/2	11
of doubling at Bilge, or increased thickness, and length applied <u>1/2 length</u>	3 Strakes	1	3 Strakes	1
fm up. part of Bilge to l. edge of Sh'rstrake	11	—	10 1/2	11
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	40	13	40	13
Up. or Spar Dk Sh'rstrake, brdth & thickness	11 1/2	8 1/4	3 1/2	13 1/2
Butt Straps to outside plating, breadth & thickness	11 1/2	8 1/4	3 1/2	13 1/2
Lengths of Plating	Five Spaces	of frames		
Shifts of Plating, and Stringers	Two and three Spaces	do		
Gunnwale Plate on ends of Awaiting Spar, or Upper Deck Beams, breadth and thickness	35	10	35	10
Angle Iron on ditto	5 1/2 x 4 x 9	5 1/2 x 4 x 9		
Tie Plates fore and aft, outside Hatchways	11 1/2	10	11 1/2	10
Diagonal Tie Plates on Beams No. of Pairs, 5	11 1/2	10	11 1/2	10
Planksheer material and scantling	Gutter Gunnwale			
Waterways do. do.				
Flat of Upper Deck do. do.	At P. Pine			
How fastened to Beams	Iron nut and Saw bolts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
Is the Stringer Plate attached to the outside plating?				
Angle Irons on ditto, No.				
Tie Plates, outside Hatchways				
Diagonal Tie Plates on Beams, No. of pairs				
Waterways materials and scantlings				
Flat of Middle Deck do. do.				
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	3 1/2	9	3 1/2	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No.	4 x 4 x 9	4 x 4 x 9		
Stringer or Tie Plates, outside Hatchways	11 1/2	9	11 1/2	9
Flat of Lower Deck	3 1/2	2 Pine		
Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2	2 Pine		
Main piece of Rudder, diameter at head do. at heel	6	3 1/4		
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 2 Thickness of <u>6</u>				

Height up Hold Beams and up to Deck as per Rule
How secured to sides of ship between double frames
Size of Vertical Angle Irons 3 1/2 x 8 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? Yes

Riveted through plates with 7/8 in. Rivets, about 7 apart.

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Manager & Manager of the Ship

IRON 457-0424

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? Solid Single Pieces
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? in a few instances 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.

State also Length and Diameter of Lower Masts and Bowsprit See Sketch attached

12903 Iron

NUMBER for EQUIPMENT 22,720

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
Two	Fore Sails,	Chain ...	300	2	72	270x2	72	Bowers ...	3	28.3.22	35.2.2-0	38.0-0	34.70-0.0
Two	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	300	2	72	270x2	72	(State Machine where Tested, Date, and name of Superintendent.)	3	38.2.14	34.7.3-7	38.0-0	34.70-0.0
Two	Fore Topmast Stay Sails	Chain ...	90	1 1/8	90	90.11	90	Stream ...	1	14.3.21	3-	32.1-6	30.7-0.0
Two	Main Sails,	Hmpn Strm Cbl	90	1 1/8	90	90.11	90	Kedges ...	2	7.1.21	3-	32.1-6	30.7-0.0
Two	Main Top Sails,	Hawser ...	90	1 1/8	90	90.11	90						
		Towlines ...	90	1 1/8	90	90.11	90						
		Warp ...	90	1 1/8	90	90.11	90						
		quality good	90	1 1/8	90	90.11	90						

Standing and Running Rigging Complete sufficient in size and Good in quality. She has Seven Long Boats and 2 fitted with Engines

The Windlass is Iron Patent (1 Capstan 1/3 SH) and Rudder Good Pumps 2 Main 1 Sec in Bulkhead

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? Side ports

Cargo Hatchways. How formed? Plates 2 1/2 in deep & angle 1 1/2 in corner iron

State size Main Hatch 15 ft 10 in by 12 ft with Forehatch 8 ft by 6 ft 2 in Quarterhatch 8 ft by 6 ft 2 in

If of extraordinary size, state how framed and secured? a deck plate beam in middle & strong iron framing of the

What arrangement for shifting beams? ✓

Hatches, If strong and efficient? Yes

Order for Special Survey No. <u>2417</u>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<u>Built under S. Land, surveyed 1873 March 7-64 1115132125 April 2-4-56</u>
Date <u>24 March 1873</u>	2nd. On the plating during the process of riveting	<u>111514922242523 May 1-64 12141614192126282931 June 14-61013 July 4-74 1115132125</u>
Order for Ordinary Survey No. <u>236</u>	3rd. When the beams were in and fastened, and before the decks were laid...	<u>192023262830 Feb 2-4-64 11151321252324 March 2-65 492130 April 8-1015172229 May 14-12-15</u>
Date <u>24 March 1873</u>	4th. When the ship was complete, and before the plating was finally coated or cemented...	<u>192227 June 10-15 2429</u>
No. <u>236</u> in builder's yard.	5th. After the ship was launched and equipped	

General Remarks, (State quality of workmanship &c.)

Good.
This Vessel has a Full Poop 40 feet long, a Top-gallant Forecastle 44 ft long; and a Deck House 16 1/2 by 40 ft.
All the inner courses of Plating are increased to 1/16 in thick, those in the 'tween decks are triple riveted for three fourths the length and ships with straps 1/16 in thicker than the plates they connect. This is in lieu of the 'tween Deck Stringer as required by Rule. See Secretary's letter dated 1st March 1873.
At the Fore and Main masts there are Diagonal tie plates fitted at the Hold Beams.

State if one, two or three decked vessel, and See above and lengths of poop, forecabin, and length of hold, as of bulkhead, and length of hold, as of bulkhead.
How are the surfaces preserved from oxidation? Inside Cement to Bilge paint above Outside Paint & Zinc paint & Tallow

I am of opinion this Vessel should be Classed +100 A1

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

Special ... £ 64: 1: 6 24 June 1874
Certificate ... ✓

(Travelling Expenses)
(if any) £

Committee's Minute 30 June 1874

Character assigned 100 A1

When the stream & kedges anchors are supplied, the Vessel would appear to be eligible to be classed as recommended by 100 A1.
It is stated they are See Surveyors' Report