

# IRON SHIP.

Survey held at Stockton

Date, First Survey 15<sup>th</sup> May

Last Survey 14<sup>th</sup> Nov<sup>r</sup> 18<sup>86</sup>

Ship British Enterprise

Master John Glennie Gray

AGE under 1549.58

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

Built at Stockton

Deck 96.83

HALF BREADTH (moulded) ... .. 20.0

When built 1846 Launched 5<sup>th</sup> Oct<sup>r</sup> 1846

Coop. on Dk. 35.94

DEPTH from upper part of Keel to top of Upper Deck Beams 25.10

By whom built Richardson Dicks & Co

Houses 18.83

GIRTH of Half Midship Frame (as per Rule) ... .. 39.4

Owners British Shipowners

Ditto of Forecastle 16.83

1st NUMBER ... .. 85.5

Port belonging to Sunderland

Gross Tonnage 1696.18

1st NUMBER, if ~~THREE DECKED VESSEL~~ [deduct 7 feet]

Destined Voyage Australia

Less Crew Space 1639.58

LENGTH ... .. 231.5

If Surveyed while Building, Afloat, or in Dry Dock.

Less Engine Room

2nd NUMBER ... .. 20284

Register Tonnage 1639.58

PROPORTIONS—Breadths to Length ... .. under 6

as cut on Beam

Depths to Length—Upper Deck to Keel ... .. under 10

Main Deck ditto ... ..

LENGTH Feet. Inches. BREADTH—Feet. Inches. DEPTH top of Floors to Upper Deck Beams Feet. Inches. Power of Engines ... Horse. N° of Decks with flat laid two N° of Tiers of Beams two

Dimensions of Ship per Register, length, 231.5 breadth, 20.1 depth, 23.95

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness ... ..	9 x 2 3/4	9 1/2 x 2 1/2	STEM, moulding and thickness ... ..	9 x 2 3/4	9 x 2 1/2
STERN POST for Rudder do. do. ... ..	9 x 2 3/4	9 x 2 1/2	STERN POST for Propeller ... ..	9 x 2 3/4	9 x 2 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft ... ..	24	(Class 100A1)			
FRAMES, Angle Iron, for 2/3 length amidships ... ..	5 1/2 x 3 1/2	5 1/2 x 3 1/2	Do. for 1/3 at each end ... ..	5 1/2 x 3 1/2	5 1/2 x 3 1/2
REVERSED FRAMES, Angle Iron ... ..	3 1/2 x 3 1/2	3 1/2 x 3 1/2			
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... ..	25	10	thickness at the ends of vessel ... ..	8	8
depth at 1/2 the half-bdth. as per Rule ... ..	14 1/2	14 1/2	height extended at the Bilges ... ..	50	50
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ... ..	9 1/2 x 9	9 1/2 x 9	Single or double Angle Iron on Upper edge ... ..	3 1/2 x 3 1/2	3 1/2 x 3 1/2
Average space ... ..	48	48			
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ... ..	9 1/2 x 9	9 1/2 x 9	Single, or double Angle Iron, on Upper Edge ... ..	3 1/2 x 3 1/2	3 1/2 x 3 1/2
Average space ... ..	48	48			
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron ... ..	9 1/2 x 9	9 1/2 x 9	Single or double Angle Iron on Upper Edge ... ..	3 1/2 x 3 1/2	3 1/2 x 3 1/2
Average space ... ..	48	48			
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates ... ..	18	13	" Rider Plate ... ..	18	13
" Bulb Plate to Intercoastal Keelson ... ..	18	13	" Angle Irons ... ..	5 1/2 x 4	5 1/2 x 4
" Double Angle Iron Side Keelson ... ..	5 1/2 x 4	5 1/2 x 4	" Side Intercoastal Plate ... ..	5 1/2 x 4	5 1/2 x 4
" 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
BILGE 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			
BILGE 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			

Flat Keel Plates, breadth and thickness ... ..	36 1/2	12	12	12
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ... ..	10.11	1	1	10.11
fin up part of Bilge to Ir. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness ... ..	40	13	40	13
Butt Straps to outside plating, breadth & thickness Lengths of Plating ... ..	120	120	120	120
Shifts of Plating, and Stringers ... ..	48	48	48	48
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ... ..	50	10	50	10
Angle Iron on ditto ... ..	5 1/2 x 4 x 9	5 1/2 x 4 x 9	5 1/2 x 4 x 9	5 1/2 x 4 x 9
Tie Plates fore and aft, outside Hatchways ... ..	14	10	14	10
Diagonal Tie Plates on Beams No. of Pairs, 5 ... ..	14	10	14	10
Planksheer material and scantling ... ..	Gutter	2	2	2
Waterways do. do. ... ..	4 1/2	4	4	4
Flat of Upper Deck do. do. ... ..	4 1/2	4	4	4
How fastened to Beams ... ..	6.8.11.13.8	6.8.11.13.8	6.8.11.13.8	6.8.11.13.8
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... ..	35	9	35	9
Is the Stringer Plate attached to the outside plating? ... ..	Yes	Yes	Yes	Yes
Angle Irons on ditto, No. ... ..	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Tie Plates, outside Hatchways ... ..	14	10	14	10
Diagonal Tie Plates on Beams, No. of pairs ... ..	3	3	3	3
Waterways materials and scantlings ... ..	2 1/2	2 1/2	2 1/2	2 1/2
Flat of Middle Deck do. do. ... ..	2 1/2	2 1/2	2 1/2	2 1/2
How fastened to Beams ... ..	6 1/2	6 1/2	6 1/2	6 1/2
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... ..	3 1/2	3 1/2	3 1/2	3 1/2
Is the Stringer Plate attached to the outside plating? ... ..	Yes	Yes	Yes	Yes
Angle Irons on ditto, No. ... ..	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Stringer or Tie Plates, outside Hatchways ... ..	14	10	14	10
Flat of Lower Deck do. do. ... ..	2 1/2	2 1/2	2 1/2	2 1/2
Ceiling betwixt Decks, thickness and material ... ..	2 1/2	2 1/2	2 1/2	2 1/2
in hold do. do. ... ..	2 1/2	2 1/2	2 1/2	2 1/2
Main piece of Rudder, diameter at head ... ..	6 1/2	6 1/2	6 1/2	6 1/2
do. at heel ... ..	3 1/2	3 1/2	3 1/2	3 1/2
Can the Rudder be unshipped afloat? ... ..	Yes	Yes	Yes	Yes
Bulkheads No. one Thickness of ... ..	4 1/2	4 1/2	4 1/2	4 1/2
Height up ... ..	4 1/2	4 1/2	4 1/2	4 1/2
How secured to sides of ship ... ..	Double frames	Double frames	Double frames	Double frames
Size of Vertical Angle Irons ... .. and distance apart ... ..	3 1/2	3 1/2	3 1/2	3 1/2
Are the outside Plates doubled two spaces of Frames in length? ... ..	Yes	Yes	Yes	Yes

Transoms, material. Knight-heads. Hawse Timbers. Plating & Angles  
Windlass Patent Pull Bitt

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 1/8 in. Rivets, about 1/2 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to Gunwale 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 1/8 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 1/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1/8 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of Three Strakes at Bilge for one-half length, treble riveted with Butt Straps 1/6 thicker than the plates they connect.

Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1/8 in. diameter, averaging 3 1/2 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 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.

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

Breadth of laps of plating in double riveting 1 1/2 Breadth of laps of plating in single riveting 1

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

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

Beams of the various Decks, how secured to the sides? Beam ends turned & welded No. of Breasthooks, Five Crutches, Four

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good

Manufacturer's name or trade mark, Hodkins & Co. B. Mansfield

The above is a correct description.

Surveyor's Signature, Richardson Dicks & Co

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



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 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? *None in Butts*

17331/2

Masts, Bowsprit, Yards, &c., are *Iron* in *good* condition, and sufficient in size and length. If of Iron or Steel Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, show the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name. *Bowfield*

State also Length and Diameter of Lower Masts and Bowsprit *Fore Mast 84' x 9" x 31", three plates in the round, 7/16, 5/16, 3/16, three angles 5 1/2 x 3 1/2 x 9/16, cheeks 1 1/16, angles 5 1/2 x 3 1/2 x 9/16, all seams single riveted & butts double riveted. Main Mast 84' x 3" x 25" in other respects as Fore Mast. Mizen Mast 49' x 2" x 28" plates 3/16, 5/16, three angles 4 x 3 x 1/4, cheeks 9/16, angles 4 1/2 x 3 1/2 x 5/16 in other respects as Fore Mast. Bowsprit 34' x 30" plates 3/16, 5/16, three angles 4 x 3 x 1/4, cheeks 9/16, angles 4 1/2 x 3 1/2 x 5/16 in other respects as Fore Mast.*

NUMBER FOR EQUIPMENT				ANCHORS			
N <sup>o</sup> .	SAILS.	CABLES, &c.	Breaking strain in tons	N <sup>o</sup> .	Weight.	Test per Certificate	Wt. req'd per Rule.
	Fore Sails,	Chain	240 1 1/16	Bowers	3 { 36-2-21	33-15-0	36-2-0
	Fore Top Sails,	Slings	240 1 1/16		3 { 36-2-0	33-8-3	36-2-0
	Fore Topmast Stay Sails	Slings	240 1 1/16		3 { 32-0-0	30-2-2	31-0-3
	Main Sails,	Hmpn Strm Cbl	90 1 1/16		Same as Chain Cables		
	Main Top Sails,	Hawser	90 10	Stream	1 { 140-24	120-18	120-0
		Towlines	90 12	Kedges	2 { 4-0-2	4-0-0	4-0-0
		Warp	90 12		2 { 3-2-2	3-2-0	3-2-0
		quality good	90 6				

Standing and Running Rigging *Iron & Hemp* sufficient in size and *good* in quality. She has 3 *5 1/2* Long Boats and *three* others. The Windlass is *good* Capstan *good* and Rudder *good* Pumps *good* (from metal)

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? *By Pumps and five scuppers each side*

Cargo Hatchways. How formed? *5/16 Iron Beamings*

State size Main Hatch *16' x 11'* Forehatch *8' x 6'* Quarterhatch *2 of 8' x 3' x 6'*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Beamings plate 22' x 1 1/16 with two angles 3 1/2 x 3 1/2 x 1 1/16*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>546</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>May 15, 30 June 12, 19, 22, 24, 29 July 4, 11, 18, 19</i>
Date <i>May 1876</i>	2nd. On the plating during the process of riveting	<i>26, 28, 31 Aug 2, 12, 21, 24, 29, 31 Sept 5, 6, 9, 11, 18, 20</i>
Order for Ordinary Survey No. <i>222</i>	3rd. When the beams were in and fastened and before the decks were laid	<i>25, 29, 28 Oct 2</i>
Date <i>May 1876</i>	4th. When the ship was complete, and before the plating was finally coated or cemented	<i>and 17<sup>th</sup> 1876</i>
No. <i>222</i> in builder's yard	5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *Workmanship and Materials good*

*Has a topgallant Forecastle frame to top height. Beams Bulk 6' x 5/16, angles on de 2 1/2 x 2 1/2 x 5/16. Stringer on de 2 1/2 x 5/16, angles 3 x 3 x 5/16. 3/16 plate 9' x 5/16. Plating 5/16. Deck 3' 1/4 P fastened with 5/16 b.s.s.s.*

*Poop rounded gunwale. Beams 6' x 3' x 5/16. Stringer on de 2 1/2 x 5/16. Angle on de 6' x 3' x 5/16. 3/16 plate 9' x 5/16. Plating 5/16. Deck 3' 1/4 P fastened with 5/16 b.s.s.s.*

*Keel strake doubled from Forecastle to Poop 15 1/2 x 1 1/16 x 7/16*

*Richardson Parker*

State if one, two, or three, decked vessel, or if spar, or running deck, and the lengths of poop, Forecastle, raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint*

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

The amount of the Entry Fee ... £ 5 : : : is received by me, *Nov 14<sup>th</sup> 1876*

Special ... £ 65 : 19 : 6 *Nov 14<sup>th</sup> 1876*

Certificate ...

(Travelling Expenses, if any, £ )

Committee's Minute *21<sup>st</sup> November 1876*

Character assigned *100 A 1*

