

# IRON SHIP. 17863

No. 11582 Survey held at Sunderland Date, First Survey May 30<sup>th</sup> 1876 Last Survey February 21<sup>st</sup> 1877

On the Iron Ship "Commonwealth"

Master A. Smith

Built at Sunderland

When built 1876 Launched 2<sup>nd</sup> Dec<sup>r</sup> 76.

By whom built Messrs. Wm. Foxford & Sons

Owners J. Day, Farlam, & Co. of Shields

Port belonging to Newcastle

Destined Voyage India

☒ Surveyed while Building, Afloat, & in Dry Dock.

TONNAGE under Tonnage Deck	1736.79	ONE OR TWO DECKED, THREE DECKED VESSEL.
<del>Under Deck</del>	1.02	<del>SPAR, OR AWNING-DECKED VESSEL.</del>
Ditto of Poop, or Raised or Dk.	56.52	HALF BREADTH (moulded) ... .. 16.91
Ditto of Houses on Deck	32.65	DEPTH from upper part of Keel to top of Upper Deck Beams 26.16
Ditto of Forecastle	34.75	GIRTH of Half Midship Frame (as per Rule) ... 39.45
Gross Tonnage	1861.73	1st NUMBER ... .. 82.52
Less Crew Space	40.91	1st NUMBER, if a THREE-DECKED VESSEL 7.00
Less Engine Room	595.75	[deduct 7 feet] 75.52
Register Tonnage as cut on Beam	1225.07	LENGTH ... .. 279.0
		2nd NUMBER ... .. 21070
		PROPORTIONS—Breadths to Length <u>Under</u> 8 1/2 X 12
		Depths to Length—Upper Deck to Keel ... .. 11 1/4
		Main Deck ditto ... .. 15 1/4

LENGTH on deck as per Rule ...	279	BREADTH Moulded ...	33	DEPTH top of Floors to Upper Deck Beams ...	24	Power of Engines ...	160	N <sup>o</sup> . of Decks with flat laid ...	Two
				Do. do. Main Deck Beams ...	17			N <sup>o</sup> . of Tiers of Beams ...	Three

Dimensions of Ship per Register, length, 279.7 breadth, 34.1 depth, 24.25

	Inches in Ship	Inches per Rule		Inches in Ship	Inches per Rule
KEEL, depth and thickness ...	9 X 2 1/2	9 1/2 X 2 1/2	FLAT KEEL PLATES, breadth and thickness ...	36	12
STEM, moulding and thickness ...	8 1/2 X 2 1/2	9 X 2 1/2	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ...	11 1/4	12
STERN-POST for Rudder do. do. for Propeller ...	9 X 5	9 X 5	fm up. part of Bilge to l. edge of Sh'rstrake	11 1/4	12
Distance of Frames from moulding edge to moulding edge, all fore and aft ...	24 in	24 in	Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness	40	13
FRAMES, Angle Iron, for 1/2 length amidships ...	5 X 3	5 X 3	Butt Straps to outside plating, breadth & thickness	10 1/2	8 1/4
Do. for 1/2 at each end ...	5 X 3	5 X 3	Lengths of Plating ...	10 feet	
REVERSED FRAMES, Angle Iron ...	3 X 3	3 X 3	Shifts of Plating, and Stringers ...	2 spaces	7 frames
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ...	23 1/2	9	Gunwale Plate on ends of <del>Awning, Spar, or</del> Upper Deck Beams, breadth and thickness ...	60	9
thickness at the ends of vessel ...	7	7	Angle Iron on ditto ...	4 X 4 X 9	4 X 4 X 9
depth at 1/2 the half-bdth. as per Rule ...	12 1/2	11 1/4	Tie Plates fore and aft, outside Hatchways	14	9
height extended at the Bilges ...	a fair taper		Diagonal Tie Plates on Beams No. of Pairs,		
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron	2 1/2	2 1/2	Planksheer material and scantling ...		
Single or double Angle Iron on Upper edge	2 1/2	2 1/2	Waterways do. do. ...		
Average space ...	alternate frames		Flat of Upper Deck do. do. ...	4 1/2	4
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron	5 1/2	3	How fastened to Beams ...	from nut and screw bolts	
Single or double Angle Iron on Upper Edge			Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	40	10
Average space ...	on every frame		Is the Stringer Plate attached to the outside plating?	Yes	
BEAMS, Lower Deck, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron	8	8	Angle Irons on ditto, No. 2	4 X 4 X 9	4 X 4 X 9
Single or double Angle Iron on Upper Edge			Tie Plates, outside Hatchways	Iron deck	
Average space ...	as profile approved see sketch on sketch		Diagonal Tie Plates on Beams, No. of pairs	Iron Deck	
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	18	13	Waterways materials and scantlings ...	6/16 Iron deck	
" Rider Plate ...	12	13	Flat of Middle Deck do. do. ...	Riveted	
" Bulb Plate to Intercostal Keelson ...			How fastened to Beams		
" Angle Irons ...	5 1/2	4	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ...	37	9
" Double Angle Iron Side Keelson ...			Is the Stringer Plate attached to the outside plating?	Yes	
" Side Intercostal Plate			Angle Irons on ditto, No. three	4.4.9	5 1/2 4.9
" do. Angle Irons ...	5 1/2	4	Stringer or Tie Plates, outside Hatchways		
" Attached to outside plating with angle iron	3	3	Flat of Lower Deck ...	2 in battens & space	
BILGE Angle Irons	5 1/2	4	Ceiling betwixt Decks, thickness and material in hold do. do. ...	2 1/2	3 1/4
" do. Bulb Iron ...			Main piece of Rudder, diameter at head do. at heel	6 3/4	3 1/2
" do. Intercostal plates riveted to plating for length			Can the Rudder be unshipped afloat?	Yes	
BILGE STRINGER Angle Irons	5 1/2	4	Bulkheads No. 5 Thickness of 6 X 3 1/2		
Intercostal plates riveted to plating for 3/5 length. angle iron	3	3			
SIDE STRINGER Angle Irons					

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

Windlass Emerson & Walker & Co. Ltd Served to plates &c

The FRAMES extend in one length from Keel to gunwale Riveted through plates with 7/8 in. Rivets, about 7 apart.

The REVERSED ANGLE IRONS on floors and frames extend near middle line to Main deck stringer A.T. and to gunwale 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 3/4 ins. from centre to centre.

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

Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

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

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

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

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

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

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

Beams of the various Decks, how secured to the sides? Main Deck Brackets, ~~hinges~~ remainder ends turned down & rivets to sides No. of Breasthooks, Six Crutches, four

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

Manufacturer's name or trade mark, all plates &c. Stockton Mal & Co. Crack and Co. also Stockton Mal Iron Co.

The above is a correct description.

Builder's Signature, William Foxford & Sons

Surveyor's Signature, James Wilson

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? *Yes*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes very well*  
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 *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  
*This Vessel's masts are the same as the "Peer of the Realm" See Report No. 11395. being a sister ship.*

Makers of Iron, Bowesfield Iron Comp., submitted to both hot & cold tests and proved *satisfactory*

NUMBER FOR EQUIPMENT 25325		Fathoms.	Inches.	Test per Certificate	Length & Size req'd pr Rule	Test req'd per Rule	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate	Weight req'd per Rule.	Test req'd per Rule.
SAILS.							Bowers	1	31.2.0	29.15.0.0	32.0.0	30 1/10
Fore Sails,												
Fore Top Sails,												
Fore Topmast Stay Sails												
Main Sails,												
Main Top Sails,												
CABLES, &c.												
Chain		270	1 1/2	59 1/8	270.1 1/2	59 1/8						
Hawser		90	1 1/4	82 3/4		82 3/4						
Towlines		180	7/2									
Warp		180	5									
quality												

Standing and Running Rigging *Iron & Rope* sufficient in size and *good* in quality. She has *Two Life Long Boats* and *two others*. The Windlass is *Emerson & Walker Iron* Capstans *2 & 5 inches* and Rudder *good* Pumps *good as per Sketch*.

Engine Room Skylights.—How constructed? *Iron Coamings 6 ft high* How secured in ordinary weather? *Thumb Screws*

What arrangements for deadlights in bad weather? *Solid Shutter fitted with Bulls Eyes*

Coal Bunker Openings.—How constructed? *Iron Coamings* How are lids secured? *6 ft Ser 2 ft 6 in* Height above deck? *9 in and 5 in*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports in the Bulmarks and Scuppers*

Cargo Hatchways.—How formed? *Iron Coamings fitted in the usual manner*

State size Main Hatch *20 ft x 11 ft.* Forehatch *10 ft x 8 feet* Quarterhatch *8 x 8 ft & two others 11 1/2 x 8 ft & 8 x 8 ft*

If of extraordinary size, state how framed and secured *Main Hatch has one Webb Shifting Beam*

What arrangement for shifting beams? *the whole have a Wood fore and aft Barling*

Hatches, If strong and efficient? *Solid and efficient. In addition Main Hatch has double width tie plates.*

Order for Special Survey No. *2636* Date *20th June 1876*

Order for Ordinary Survey No. *---* Date *---*

No. *814* in builder's yard.

General Remarks (State quality of workmanship, &c.) *Good: See letters. 9th June 76. & 26th Jan 77.*

*She has Top gallant Forecastle 29 ft, wings to 22 6 feet;*

*Bridge House 24 feet; Full Poop 30 feet from Pooh.*

*She has two Water Ballast Tanks, the one in the*

*Fore Hold is 40 feet long, and extends up to the Hold Beams*

*as to height, the foremost Engine Room Bulthead forms*

*one end of it, this and the fore end of the Tank has*

*been efficiently strengthened with angles and Bulbs and*

*the crown is strengthened in a similar manner by*

*fore and aft angles attached to the athwartship angle Beams*

*The Tank in the after Hold is constructed*

*in the usual manner and is 40 feet long both*

*Tanks have been tested to a head of water above*

*the Load Line and proved Satisfactory.*

*N.B. Four tracings attached*

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

How are the surfaces preserved from oxidation? Inside *Cement to bilges painted ab<sup>2</sup>* Outside *Composition paint or Bottom paint above*

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

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

Special ... £ *70 : 10 : 6* *21st Feb 1877*

Certificate ... *---*

(Travelling Expenses, if any, £ *---*).

Committee's Minute *23rd February 1877*

Character assigned *100 A. 1.*