

IRON SHIP.

No. 15403 Survey held at Newcastle
On the Iron S.S. "Dryburgh Abbey" 2 Mast. Sch Rig

Date, First Survey 20th Aug 1880 Last Survey 2nd June 1881
Master James Forbes

TONNAGE under 2207.15
Tonnage Deck 21.22
Ditto of Hold, &c. 3.10
Ditto of Upper Deck 31.40
Ditto of Lower Deck 1.62
Gross Tonnage 2264.49
Less Crew Space 58.69
2205.80
Less Engine Room 724.64
Register Tonnage 1481.16
as out on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
Feet.
HALF BREADTH (moulded) 18.5
DEPTH from upper part of Keel to top of Upper Deck Beams 21.5
GIRTH of Half Midship Frame (as per Rule) 34.5
1st NUMBER 74.5
1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet
LENGTH 288.5
2nd NUMBER 214.93
PROPORTIONS—Breadths to Length 7.7
Depths to Length—Upper Deck to Keel 13.4
Main Deck ditto

Built at Newcastle
When built 1881 Launched 30th April
By whom built Wigham Richardson & Co
Owners Wood Brothers & Co
Port belonging to Liverpool
Destined Voyage Madras
If Surveyed while Building, Afloat, or in Dry Dock.
While building.

LENGTH	Feet.	Inches.	BREADTH	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of Engines	Horse.	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
Deck as per Rule	288	6	Moulded	37	0	top of Floors to Upper Deck Beams	27	6 1/2	100	100	Two	Four
Dimensions of Ship per Register, length, 290.			breadth, 37.2			depth, 27.5						
KEEL, depth and thickness												
EM, moulding and thickness												
ERN-POST for Rudder do. do.												
" " for Propeller												
Distance of Frames from moulding edge to moulding edge, all fore and aft												
AMES, Angle Iron, for 1/2 length amidships												
Do. for 1/2 at each end												
VERSED FRAMES, Angle Iron												
DOORS, depth and thickness of Floor Plate												
at mid line for half length amidships												
thickness at the ends of vessel												
depth at 1/2 the half-bdth. as per Rule												
height extended at the Bilges												
AMES, Upper Spar, or Awning Deck												
Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron												
do. or double Angle Iron on Upper edge												
Average space												
AMES, Main, or Middle Deck												
Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron												
do. or double Angle Iron on Upper Edge												
Average space												
AMES, Lower Deck, Hold, or Orlop												
Angle or d'ble Ang. Iron, Plate or Tee Bulb Iron												
do. or double Angle Iron on Upper Edge												
Average space												
ELSONS, Centre line, single or double plate												
do. or Intercoastal Plates												
Rider Plate before middle line bulkhead												
Bulb Plate to Intercoastal Keelson												
Angle Irons												
Double Angle Iron Side Keelson												
Side Intercoastal Plate												
do. Angle Irons												
Attached to outside plating with angle iron												
GE Angle Irons												
do. Bulb Iron												
do. Intercoastal plates riveted to plating for length												
GE STRINGER Angle Irons												
Intercoastal plates riveted to plating for 1/2 length												
GE STRINGER Angle Irons												
Planks, material. Knight-heads. Hawse Timbers.												
class Iron Pall Bitt												

FRAMES extend in one length from Keel to Gunwale
REVERSED ANGLE IRONS on floors and frames extend from across middle line to Spar deck stringer plate and to every frame alternately
ELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes
ATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 5/8 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 1/2 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 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 1/2 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
Edges of Main Sheerstrake, double or single riveted.
Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 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?
Waterway, how secured to Beams (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides By Welded Plates & Angle Irons No. of Breasthooks, 6 Crutches, 4
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Butts:—Dorman Long & Co
Manufacturer's name or trade mark, Plates, for Head &c.
The above is a correct description.
Builder's Signature, Wigham Richardson & Co
Surveyor's Signature, J. H. Cooke
Surveyor to Lloyd's Register of British and Foreign Shipping.

NWC 778-0043

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*

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 *Foremast 87' 3" x 24 1/2 dia, Mainmast 77' x 24 1/2 dia*
Plating 7/16 to 9/16. Seams double riveted, Butts both + double riveted, two plates
in the round no inside angles. Materials for Head + 6°.

NUMBER for EQUIPMENT 26097		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight, Ex. Stock.	Test per Certificate	Wt per Rule.	Machine where Tested & Suprntd.
SAILS.							Bower Anchors	1	32.3.21	30.16.2.7	32.0.0	
N ^o .	CABLES, &c.						(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	32.2.14	30.11.3.14	32.0.0	
	Chain <i>Steel</i>	270	1 1/4	59 1/8 82 3/4	270.1 1/4	<i>233 lb x 15 ft Mar 1881</i>		1	28.0.21	27.5.1.7	27.0.23	
	Fore Sails,											
	Fore Top Sails,	75	1 1/8	22 3/4 34 1/8	75.1 1/8							
	Fore Topmast Stay Sails,						Stream	1	10.1.24	12.8.3.0	10.2.0	
	Hmpn Strm Cbl				90.12		Kedge	1	5.1.0	7.11.3.14	5.1.0	
	Hawser ...	90	4 1/4		90 9 1/2		Ditto	1	2.2.8	5 1/8	2.2.0	
	Main Sails,	90	3		90 7 1/2							
	Towlines ...	90	2 1/2									
	Warp ...	90	2 1/4									
	Main Top Sails,											
	and quality <i>Good</i>											

Standing and Running Rigging *N. H. + Manila* sufficient in size and *Good* in quality. She has *2* *Life* Long Boats and *2* others
The Windlass is *Emerson & Walker's* Capstan and Rudder *Good* Pumps *4 Hand + 1 Drum*

Engine Room Skylights.—How constructed? *Iron bonnets & deck top* How secured in ordinary weather? *By Hand Screws.*

What arrangements for deadlights in bad weather? *Strong canvas covers*

Coal Bunker Openings.—How constructed? *Plates & Angles* How are lids secured? *With Hatch Bars* Height above deck? *20"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *7 Square Pits each side + Bulwark*

Cargo Hatchways.—How formed? *Plates & Angles*
State size Main Hatch *24 ft x 13 ft* Forehatch *12 ft x 10 ft* Quarterhatch *23 ft x 13 ft + 8 ft x 8 ft*

If of extraordinary size, state how framed and secured? *Ordinary size*

What arrangement for shifting beams? *Dep Wet Plates.*

Hatches, If strong and efficient? *Solid Hatches.*

Order for Special Survey No. <i>1456</i>	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	1880 Aug 20 Sept 10. 20. 23. 29. Oct 8. 12. 19. 26. Nov 19. 23
Date <i>10th July 1880</i>		2nd. On the plating during the process of riveting	25. 30 Dec 6. 9. 13. 16. 20. 23. 31
Order for Ordinary Survey No. <i>128</i>		3rd. When the beams were in and fastened, and before the decks were laid....	1881 Jan 10. 14. Feb 1. 4. 8. 10. 14. 16. 18. 24
Date <i>10th July 1880</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	March 2. 3. 8. 10. 11. 15. 17. 23. 25. 28. 31 April 6. 13
No. <i>128</i> in builder's yard.		5th. After the ship was launched and equipped	20. 26. 28 May 2. 5. 9. 11. 17. 26 June 2

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

* This is a Spar Decked Vessel with an open Bridge 76 ft long covering the engine & boiler openings & a Deck House 44 ft long.
Built under Special Survey & accordance with the Rules & the general arrangement is conformity with the Plans submitted & approved by the Committee & the Material & Workmanship are good throughout.
Pumping arrangements—also as per Plans submitted & approved.
Ballast Tanks tested by a head of water equal to the height of the load line & found satisfactory, the particulars of the respective length & capacity are as per Record of same attached.
With reference to the Angle Irons of the several Keelsons, see Secretary's letter of the 13th Oct 1880. This is a sister ship to the P. S. "Barden Tower" Report No 15-282 with which all the drawings for the vessel were forwarded. The Test Certificates for Steel Hawsers are herewith appended.

State if one, two, or three decked vessel, or if spar, or acing decked; 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 & Paint* Outside *Paint*

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

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

Special ... £ 80 : 3 : - *4th May 1881*

Certificate ... - : - : -

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

Committee's Minute

Character assigned

Tuesday, June, 14th 1881.

100 A 1

Lloyd A & C P

100 A 1 Spar Decked

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

This vessel appears eligible to be classed as recommended

100 A 1 Spar Decked

31 of 100

No.
No.
Reg.
Mast
Engi
Boil
Reg

Form No. 8, 2000-3/10/80