

IRON SHIP.

Survey held at Dumbarton Date, First Survey Dec^r 14th 74 Last Survey 16th August 1875

Sr S^r Merkara (3 masts) Master Jas Ballantine

AGE under 2067.35
 Third Deck 249.90
 Second Deck 219.25
 First Deck 51.64
 Tonnage 2970.00
 Crew Space 70.10
 Engine Room 950.60
 or Tonnage 1950.11
 at on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.
 SPAR, OR AWNING-DECKED VESSEL.
 HALF BREADTH (moulded) 18.5
 DEPTH from upper part of Keel to top of Upper Deck Beams 30.66
 GIRTH of Half Midship Frame (as per Rule) 44.42
 1st NUMBER 93.50
 1st NUMBER, if a THREE-DECKED VESSEL 1072. Rule [deduct 7 feet 16.30]
 LENGTH 367.17
 2nd NUMBER 34359
 PROPORTIONS—Breadths to Length 9.92
 Depths to Length—Upper Deck to Keel 11.97
 Main Deck ditto 15.85

Built at Dumbarton
 When built 1873 Launched 7th July
 By whom built J. Denny & Bros
 Owners Bartholomew & Co
12 Maenool 53 Renfield St
 Port belonging to Glasgow
 and Peter Denny, Dumbarton
 Destined Voyage
 & Surveyed while Building, Afloat, or in Dry Dock.

FEET. INCHES. BREADTH—Moulded 37.00
 Rule 367.17
 DEPTH top of Floors to Upper Deck Beams 20.73
 Do. do. Main Deck Beams 20.73
 Power of Engines 400
 Horse. 400
 No. of Decks with flat laid 2 Complete
 No. of Tiers of Beams 3

Dimensions of Ship per Register, length 367.17 breadth 37.00 depth 20.73
 L. depth and thickness 11 x 3
 L. moulding and thickness 11 x 3
 IN-POST for Rudder do. do. 11 x 6
 for Propeller 11 x 6
 Distance of Frames from moulding edge to building edge, all fore and aft 24
 MES, Angle Iron, for 1/2 length amidships 5 3/2 0
 for 1/2 at each end 5 3/2 0
 REVERSED FRAMES, Angle Iron 3 3/2 0
 ORS, depth and thickness of Floor Plate 25 - 10 25 - 10
 mid line for half length amidships thickness at the ends of vessel 14 1/2
 depth at 1/2 the half-bdth. as per Rule 4 9
 height extended at the Bilges 4 9
 MS, Upper, Spar, or Awning Deck 7 7 7
 do or 4 1/2 in. Ang. Iron, Plate or Tee Bulb Iron 4 1/2 - 4 1/2
 do or double Angle Iron on Upper edge average space 4 1/2
 MS, Main, or Middle Deck 9 9 9
 do or 4 1/2 in. Ang. Iron, Plate or Tee Bulb Iron 3 3/2 3 7 3 3/2 3 7
 do or double Angle Iron, on Upper Edge average space 4 1/2
 MS, Lower Deck, Hold, or Orlop 9 9 9
 do or 4 1/2 in. Ang. Iron, Plate or Tee Bulb Iron 3 3/2 3 7 3 3/2 3 7
 do or double Angle Iron on Upper Edge average space 4 1/2
 Beams in Main hold, 10 x 1 1/2 4 angles 4 x 4 1/2 as per sketch approved.
 ELSONS Centre line, single or double plate, 23 14 23 - 14
 box, or Intercoastal, Plate 14 1/2 10 14 1/2 - 10
 Rider Plate 14 1/2 10 14 1/2 - 10
 Bulb Plate to Intercoastal Keelson 7 4 9 6 1/2 4 1/2 9
 Angle Irons 7 4 9 6 1/2 4 1/2 9
 Double Angle Iron Side Keelson 7 4 9 6 1/2 4 1/2 9
 Side Intercoastal Plate 7 4 9 6 1/2 4 1/2 9
 do. Angle Irons 7 4 9 6 1/2 4 1/2 9
 Attached to outside plating with angle iron 7 4 9 6 1/2 4 1/2 9
 GE Angle Irons 7 4 9 6 1/2 4 1/2 9
 do. Bulb Iron 7 4 9 6 1/2 4 1/2 9
 do. Intercoastal plates riveted to plating for half length 7 4 9 6 1/2 4 1/2 9
 GE STRINGER Angle Irons 7 4 9 6 1/2 4 1/2 9
 Intercoastal plates riveted to plating for length 12 - 10 11 1/2 10
 E STRINGER Angle Irons 12 - 10 11 1/2 10

Flat Keel Plates, breadth and thickness 36 13 36 13
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilge of doubling at Bilge, or increased thickness, and length applied 12 12
 in up part of Bilge to Ir. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of doubling at Sh'rstrake, & length applied 50 12 as approved
 from Min. to Upper Spar Dk. Sh'rstrake 50 13
 Up. or Spar Dk Sh'rstrake, brdth & thickness 16 1/2 9 1/2 14.10 16 1/2 9 1/2 14.10
 Butt Straps to outside plating, breadth & thickness Lengths of Plating 16 1/2 9 1/2 14.10
 Shifts of Plating, and Stringers 16 1/2 9 1/2 14.10
 Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Angle Iron on ditto 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Tie Plates fore and aft, outside Hatchways 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Waterways do. do. 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Flat of Upper Deck do. do. 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 How fastened to Beams 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Is the Stringer Plate attached to the outside plating? 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Angle Irons on ditto, No. 2 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Tie Plates, outside Hatchways 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Diagonal Tie Plates on Beams, No. of pairs, Waterways materials and scantlings 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Flat of Middle Deck do. do. 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 How fastened to Beams 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Is the Stringer Plate attached to the outside plating? 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Angle Irons on ditto, No. 2 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Stringer or Tie Plates, outside Hatchways 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Flat of Lower Deck 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Ceiling betwixt Decks, thickness and material in hold do. 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Main piece of Rudder, diameter at head do. at heel 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Can the Rudder be unshipped afloat? 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Bulkheads No. 6 Thickness of 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Height up 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 How secured to sides of ship 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Size of Vertical Angle Irons 4 1/2 4 1/2 9 4 1/2 4 1/2 9
 Are the outside Plates doubled two spaces of Frames in length? 4 1/2 4 1/2 9 4 1/2 4 1/2 9

usoms, material. Knight-heads. Hawse Timbers. Iron
 dlass Iron Patent Pall Bitt

FRAMES extend in one length from Keel to Upper deck Stringer Riveted through plates with 7/8 in. Rivets, about 6 apart.
 REVERSED ANGLE IRONS on floors and frames extend from middle line to side main & Stringer and to Upper deck Str alternately
 ELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

TING. Garboard, double riveted to Keel, with rivets 1 1/2 in. diameter, averaging 3 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 1/2 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 Strakes at Bilge for half length, treble riveted with Butt Straps 1 1/2 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double 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 riveted from and to Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper Spar Sheerstrake, treble riveted 1/2 length amidships.
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper Spar Stringer Plate, treble riveted for 1/2 length.
 Breadth of laps of plating in double riveting 5 Breadth of laps of plating in single riveting 5

Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Part treble. No rest double
 rway, how secured to Beams Butted bolts (Explain by Sketch, if necessary)
 s of the various Decks, how secured to the sides? Jugged bracket knees No. of Breasthooks, Laths Crutches, Three
 description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Mossend, Go hand, &c. There
 manufacturer's name or trade mark, Mossend, & H. & Co. Stems Clydesdale, Broomfield

The above is a correct description.
 der's Signature, J. Denny & Bros Surveyor's Signature, J. Denny & Bros
 Surveyor to Lloyd's Register of British and Foreign Shipping.

149509 rem

State also Length and Diameter of Lower Masts and Bowsprit

Species	Length	Diameter	Plates in section	Thickness	Remarks
Freemash	96.6	$\times 27^{\frac{3}{4}}$	3 plates in section	$\frac{1.5}{16}$ thick	huts trills and part under insid edges alone
Grain	97.11	$\times 27^{\frac{3}{4}}$			
Spizen	95.6	$\times 27^{\frac{3}{4}}$		$\frac{6.5}{16}$	
Fre-Yard	66.0	$\times 16^{\frac{1}{2}}$	2 plates in section	$\frac{3.5}{16}$	edges only

Standing and Running Rigging Wire themselves sufficient in size and good in quality. She has 4 Long Boats and 2 others

The Windlass is in Order Capstan good and Rudder good Pumps good

What arrangements for deadlights in bad weather? *Potable deadlights*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Open bulwarks and rail

State size **Main Hatch** 21 x 12 **Forehatch** 8 x 8 **Quarterhatch** 1 x 2 8 x 11

What arrangement for shifting beams? 3


Hatches, If strong and efficient? Yes.

Order for Special Survey No. <u>1025</u>	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	<u>Decr. 14. 17. 30 '74</u>	<u>Jan'y 11. 10. 21. 25 Feb'y 8. 10. 24</u>
Date <u>March 13/74</u>		2nd. On the plating during the process of riveting	<u>Mar. 1. 4. 11. 15. 18. 22 29</u>	<u>Apr. 15. 12. 13. 19. 22. 27. 30.</u>
Order for Ordinary Survey No. <u>✓</u>		3rd. When the beams were in and fastened, and before the decks were laid...	<u>May 3. 6. 14. 17. 21 27. 31.</u>	<u>June 3. 10. 17. 21. 24. 26.</u>
Date <u>✓</u>		4th. When the ship was complete, and before the plating was finally coated or cemented..	<u>July. 1. 5. 8. 12. 26 29</u>	<u>Aug. 2. 5. 9. 12. 16. 18. 75</u>
No. <u>1023</u> in builder's yard.		5th. After the ship was launched and equipped		

General Remarks (State quality of workmanship, &c.) The Workmanship of this vessel is good. She has been built in accordance with the approved drawings, section and strength in the engine and boiler space as sanctioned and shown on the accompanying plans.

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

I am of opinion this Vessel should be Classed *+ 100 A1. 3 Decks*

The amount of the Entry Fee ... £ 5 : 4 : 3 is received by me, 

Special £ 94: 19: 6 ^{5th Aug} 1875

Certificate ... *Gratis*

(Travelling Expenses, if any, £ 8.8.4).

Committee's Minute 24th August 1875

10/1/21

Character assigned 10051

Adel

1700

1870

