

IRON SHIP.

No. 12616 Survey held at Newcastle Date, First Survey 4th March 73 Last Survey Oct 1st 74 18 74
On the S.S. "The Osyth" Yard Number 293 Master A. Mc Nab Rec'd 10/74

TONNAGE under Tonnage Deck <u>3150.37</u>	ONE OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Newcastle</u>
Ditto of Third, Spar, or Awning Deck.	SPAR, OR AWNING DECKED VESSEL.	When built <u>1874</u> Launched <u>21st March.</u>
Ditto of Poop, Rain, or Blk. <u>209.46</u>	HALF BREADTH (moulded) <u>21.0</u> Feet.	By whom built <u>Messrs. C. Mitchell & Co</u>
Ditto of Houses on Deck. <u>100.52</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>31.3</u>	Owners <u>E. H. Watts</u>
Ditto of Forecastle <u>72.44</u>	GIRTH of Half Midship Frame (as per Rule) <u>46.3</u>	Port belonging to <u>Loudon</u>
Gross Tonnage <u>3541.39</u>	1st NUMBER <u>98.6</u>	Destined Voyage <u>Melbourne</u>
Less Crew Space <u>111.83</u>	1st NUMBER, if a THREE-DECKED VESSEL <u>7</u>	Surveyed while Building, Afloat, or in Dry Dock. <input checked="" type="checkbox"/>
Less Engine Room <u>1133.24</u>	deduct 7 feet <u>91.6</u>	
Register Tonnage as cut on Beam <u>2296.32</u>	LENGTH <u>327.6</u>	
	2nd NUMBER <u>34550</u>	
	PROPORTIONS —Breathths to Length <u>under 9</u>	
	Depths to Length—Upper Deck to Keel <u>under 13</u>	
	Main Deck ditto <u>under 17</u>	

LENGTH on deck as per Rule 377.6 Feet. **BREADTH** Moulded 42.0 Feet. **DEPTH** top of Floors to Upper Deck Beams 29.1 1/2 Inches. Do. do. Main Deck Beams 21.4 1/2 Inches. Power of Engines 450 Horse. N^o. of Decks with flat laid two N^o. of Tiers of Beams Full

Dimensions of Ship per Register, length 389.5 breadth, 42.1 depth, 28.9

	Inches in Ship.	Inches per Rule.
KEEL , depth and thickness	11 x 3	11 x 3
STEM , moulding and thickness	11 x 3	11 x 3
STERN-POST for Rudder do. do.	11 x 3 3/4	11 x 6
for Propeller	11 x 6	11 x 6
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24 (Class 100A)
FRAMES , Angle Iron, for 3/4 length amidships	5 3/2	5 3/2
Do. for 1/2 at each end	5 3/2	5 3/2
REVERSED FRAMES , Angle Iron	3 1/2	3 1/2
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	25 1/2 x 10	25 1/2 x 10
thickness at the ends of vessel	9 x 8	9 x 8
depth at 3/4 the half b'dth. as per Rule	9 x 8	9 x 8
height extended at the Bilges	57	57
BEAMS, Upper, Spar, or Awning Deck	7 1/2 x 7	7 1/2 x 7
Single or double Angle Iron, Plate or Tee Bulb Iron	3 2 1/2	3 2 1/2
Average space	in alternate frames	in alternate frames
BEAMS, Main or Middle Deck	10 x 10	10 x 10
Single or double Angle Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2
Single or double Angle Iron, on Upper Edge	3 1/2	3 1/2
Average space	in all alternate frames	in all alternate frames
BEAMS, Lower Deck, Hold or Orlop	10 x 10	10 x 10
Single or double Angle Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2
Single or double Angle Iron on Upper Edge	3 1/2	3 1/2
Average space	in all alternate frames	in all alternate frames
KEELSONS Centre line, single or double plate, box, or intercostal Plates	23 x 14	23 x 14
" Rider Plate	11 x 10	11 x 10
" Bulb Plate to Intercostal Keelson	6	6 1/2
" Angle Irons	4	4 1/2
" Double Angle Iron Side Keelson	6	6 1/2
" Side Intercostal Plate	6	6 1/2
" do. Angle Irons	4	4 1/2
" Attached to outside plating with angle iron	3 1/2	3 1/2
BILGE Angle Irons	6	6 1/2
" do. Bulb Iron	10	10
" do. Intercostal plates riveted to plating for 1/2 length	10	10
BILGE STRINGER Angle Irons	6	6 1/2
Intercostal plates riveted to plating for length	10	10
SIDE STRINGER Angle Irons	6	6 1/2
Intercostal plates riveted to plating for length	10	10
Transoms, material. Knight-heads. Hawse Timbers.	iron & oak	
Windlass	iron patent	
Pall Bitt	iron	

	Inches. In Ship.	16ths. In Ship.	Inches. required	16ths. required
Flat Keel Plates , breadth and thickness	36	17	56	13
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	12	12	12	12
fm up. part of Bilge to lr. edge of Sh'rstrake	12	12	12	12
Main Sheerstrake , breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	40	14	40	14
Up. or Spar Dk Sh'rstrake, brdth & thickness	40	11	40	11
Butt Straps to outside plating, breadth & thickness	4 1/2	15	11 1/4	10 x 15
Lengths of Plating	5	2	5	2
Shifts of Plating, and Stringers	2	do	do	do
Gunwale Plate on ends of Awning Spar, or Upper Deck Beams, breadth and thickness	75	9	75	9
Angle Iron on ditto	4 x 4	9	4 x 4	9
Tie Plates fore and aft, outside Hatchways	10	9	10	9
Diagonal Tie Plates on Beams No. of Pairs				
Plank-sheer material and scantling				
Waterways do. do.				
Flat of Upper Deck do. do.	3 1/2	7 1/2		
How fastened to Beams				
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	63	10	63	10
Is the Stringer Plate attached to the outside plating?	yes.			
Angle Irons on ditto, No. 2	4 x 4	9	4 x 4	9
Tie Plates, outside Hatchways	10	10	10	10
Diagonal Tie Plates on Beams, No. of pairs	5	10	10	10
Waterways materials and scantlings	3	10	3	10
Flat of Middle Deck do. do.	3 1/2	3 1/2		
How fastened to Beams				
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	30 1/2	9	30 1/2	9
Is the Stringer Plate attached to the outside plating?	yes.			
Angle Irons on ditto, No. 2	4 x 4	9	4 x 4	9
Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck				
Ceiling betwixt Decks, thickness and material in hold do. do.	2 1/2	8	2 1/2	8
Main piece of Rudder, diameter at head do. at heel	8	4 1/2		
Can the Rudder be unshipped afloat?	yes.			
Bulkheads No. 4 Thickness of 7 1/2				
Height up 3 1/2				
How secured to sides of ship				
Size of Vertical Angle Irons 3 1/2 x 3 1/2 and distance apart 30 ins.				
Are the outside Plates doubled two spaces of Frames in length?	yes.			

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 round middle line to about N.P.S.A.I. 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 6 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 7/8 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. Upper 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 Breadth of laps of plating in single riveting 5

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

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

Beams of the various Decks, how secured to the sides? welded pieces riveted to frames No. of Breasthooks, 5 Crutches, 4

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

Manufacturer's name or trade mark, Josh. Wilson & Bell: the plating from the Corsett Iron Works; the

The above is a correct description. Hartlepool M.S. Co.; Palmer's, Glasgow; and the Steelite M.S. Co.

Builder's Signature, C. Mitchell & Co. Surveyor's Signature, A. J. Reed

Workmanship. Are the butts of plating planed or otherwise fitted? Planed 13535 Iron
 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? fairly so
 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 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 iron, length 92.6 clear 2 1/2"
Mainmast " " 80.0 do 2 1/2"
 Fore and main masts of iron 7/16 and 5/16" thick, two plates in the round, lands double riveted, butts double riveted, but table riveted in way of partners. The plating from the Stockton Malleable Iron Co.

NUMBER for EQUIPMENT	Fathoms.	Inches.	Test per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
3000	300	2 1/16	765/8	300-2 1/16	76 1/2	Bowers ...	3	40.0.7 38.2.12 34.2.0	35.15.3.2 34.17.5.7 32.0.0.0	40.0.0 40.0.0 34.0.0	35 1/2 35 1/2 31 1/2
						Stream ...	1	15.2.0		15.0.0	
						Kedges ...	2	4.2.14 3.3.0		7.2.0 3.3.0	

Standing and Running Rigging heup sufficient in size and good in quality. She has two life Long Boats and 5 others.
 The Windlass is good Capstan good and Rudder good Pumps good & sufficient

Engine Room Skylights.—How constructed? solid shutters & bulwags How secured in ordinary weather? latched

What arrangements for deadlights in bad weather? solid shutters

Coal Bunker Openings.—How constructed? Cabin Comings How are lids secured? latched down Height above deck? 9 1/2

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? clew ports each side

Cargo Hatchways.—How formed? in comings and head ledges riveted together

State size **Main Hatch** 20' x 12' Forehatch 12' x 9' Quarterhatch 16' x 12'

If of extraordinary size, state how framed and secured? ordinary size

What arrangement for shifting beams? Two shifting below of halbrion and double angles

Hatches, If strong and efficient? Yes

Order for Special Survey No. 293 Dates 20 Dec 1872

Order for Ordinary Survey No. — Date —

No. 293 in builder's yard. 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 built under Special Survey

2nd. On the plating during the process of riveting 1873 March 4.12.19. July 1.10.16.22.29. Aug 1.8.

3rd. When the beams were in and fastened, and before the decks were laid 1873 Feb 4.11.19. Oct 3.10.16.28.

4th. When the ship was complete, and before the plating was finally coated or cemented Nov. 5.12.18.26. Dec. 2.12.18.

5th. After the ship was launched and equipped 19.24.31.1874. Jan 10.16.22.30. Feb 9.14.18.24. March 4.10.16.20.23. April 27. May 12.19.22.28. June 5.12.18. July 3.27. Aug 11.13. 25.28. Sep 2.8.11.17. Oct 1.

General Remarks, (State quality of workmanship &c.) This is a three decked vessel, with a poop 96 feet, and a topgallant forecastle 52 feet long. Under the rigging the main frames are doubled out to the bulwags.

Crossing the engine & boiler space are two hunter bulkheads 7/8" thick, three semi-box beams, two formed of built iron 10 x 7/8" and double angles 4 x 4 x 9/16", and an additional one is fitted over the hollow of plate and double angles top and bottom, the plate being 14 x 7/8" and the angles 6 x 4 x 9/16", secured by deep keelp lates to the frames. She is fitted with semi-box beams in the fore and after holds, spaced as per plate.

She is also fitted with panting-beams and a stringer-plate riveted to the skin. She has an iron main deck extending from the collision bulkhead to extreme after end of the vessel, the same being 7/16" thick for 1/2 length amidships, and 9/16" at the ends, all butts double riveted. A doubling plate 12/16" thick is wrought between the main and upper deck.

There is a length of 160 feet amidships, the butts of which are all table riveted; and a strengthening-plate 16 feet long and 2 1/2" deep is wrought above the upper deck stringer plate in way of fore-main hatchway. She is to be Barque rigged, and the workmanship throughout is good.

It is hoped that the slight deficiency, quite accidental, to be observed in the case of the 2nd lower anchor will not be the cause for delaying the vessel's departure.

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecastle or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside by cement and paint Outside by paint & copperation

I am of opinion this Vessel should be Classed 100 A. I. Three decks, three tiers of beams.

The amount of the Entry Fee ... £ 5 : : : is received by me, R. Young on 3429 Iron Special Certificate ... £ 110 : 14 : 6 14/10/74

(Travelling Expenses) (if any) £ —

Committee's Minute 16th October 1874

Character assigned 100 A. I.

M.C. 2 Decks 3 Tiers of Beams Three Decks at

24/11/74 R.

Name B. Mitchell 96, Lower water, near at the on the

