

# IRON SHIP.

No. 4023 Survey held at Dundee Date, First Survey 26 May Last Survey 10 Nov 1876

On the Bk. "Melchan"

Master Aimes.

TONNAGE under 602-23 ONE, OR TWO DECKED, THREE DECKED VESSEL.

Tonnage Deck SPAR, OR AWNING-DECKED VESSEL.

Ditto of Third, Spar, HALF BREADTH (moulded)... 14-25

or Awning Deck. Ditto of Poop, or DEPTH from upper part of Keel to top of Upper Deck Beams 19-33

Raised Qr. Dk. Ditto of Houses GIRTH of Half Midship Frame (as per Rule) 29-41

Ditto of Forecastle 1-44 1st NUMBER 62-99

Gross Tonnage 635-86 1st NUMBER, if a THREE-DECKED VESSEL

Less Crew Space 31-42 LENGTH 174-0

Less Engine Room 2nd NUMBER 10960-3

Register Tonnage 604-44 PROPORTIONS—Breadths to Length

as cut on Beam Depths to Length—Upper Deck to Keel 9

Main Deck ditto 6

Built at Dundee

When built 1876 Launched 18 Oct 76.

By whom built Mr W B Thompson

Owners A. M. Banks & Co

Port belonging to Dundee

Destined Voyage Monte Video

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

While Building & afloat.

LENGTH on deck as per Rule 174 - BREADTH Moulded 28 6 DEPTH top of Floors to Upper Deck Beams 17 10 Power of Engines ... Horse. No. of Decks with flat laid Plating No. of Tiers of Beams Two

Dimensions of Ship per Register, length 180-4 breadth, 28-66 depth, 17-65.

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	7 1/2 x 2 1/4	7 1/2 x 2 1/4	FLAT KEEL PLATES, breadth and thickness	33	9
STEM, moulding and thickness	7 x 2 1/4	7 x 2 1/4	PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	8	8
STERN-POST for Rudder do. do.	7 x 2 1/4	7 x 2 1/4	fm up. part of Bilge to lr. edge of Sh'rstrake	8	8
for Propeller	22	22	Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	33	10
Distance of Frames from moulding edge to moulding edge, all fore and aft	22	22	Up. or Spar Dk Sh'rstrake, brdth & thickness	33	10
FRAMES, Angle Iron, for 1/2 length amidships	4 3 7	4 3 7	Butt Straps to outside plating, breadth & thickness	16 1/2 x 7/8	14 1/2 x 7/8
Do. for 1/4 at each end	4 3 6	4 3 6	Lengths of Plating	5 frame spaces.	5 ft 3 in.
REVERSED FRAMES, Angle Iron	3 3 6	3 3 6	Shifts of Plating, and Stringers	2 ft 1 in.	2 ft 1 in.
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	18 x 8	18 x 8	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	32 1/2	8
thickness at the ends of vessel	7	7	Angle Iron on ditto	4 1/2 x 3 x 7/16	4 1/2 x 3 x 7/16
depth at 1/2 the half-bdth. as per Rule	9 1/2	9 1/2	Tie Plates fore and aft, outside Hatchways	9	8
height extended at the Bilges	36	36	Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling	Waterways do. do.	Gutter.
BEAMS, Upper, Spar, or Awning Deck	6 1/2 x 6	6 1/2 x 6	Flat of Upper Deck do. do.	How fastened to Beams	Galv. Se. Bolts.
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	2 1/2 x 2 1/2	2 1/2 x 2 1/2	Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	23	7
Single or double Angle Iron on Upper edge	44	44	Is the Stringer Plate attached to the outside plating?	yes.	
Average space	44	44	Angle Irons on ditto, No.	3 1/2, 3 1/2, 7/16	3 1/2, 3 1/2, 7/16
BEAMS, Main, or Middle Deck	7 x 7	7 x 7	Stringer or Tie Plates, outside Hatchways	9	8
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 6	3 3 6	Flat of Lower Deck	2 1/2 x 2 1/2	2 1/2 x 2 1/2
Single or double Angle Iron on Upper Edge	22 x 4 1/2	22 x 4 1/2	Ceiling betwixt Decks, thickness and material in hold	2 1/2 x 2 1/2	2 1/2 x 2 1/2
Average space	22 x 4 1/2	22 x 4 1/2	Main piece of Rudder, diameter at head	4 1/2	4 1/2
BEAMS, Lower Deck, Hold, or Orlop	7 x 7	7 x 7	do. at heel	2 3/4	2 3/4
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 3 6	3 3 6	Can the Rudder be unshipped afloat?	yes.	
Single or double Angle Iron on Upper Edge	22 x 4 1/2	22 x 4 1/2	Bulkheads No. one Thickness of	6/16.	6/16.
Average space	22 x 4 1/2	22 x 4 1/2	Height up	20 upper deck.	
KEELSONS Centre line, single or double plate, box, or intercostal, plates	12 x 10	12 x 10	How secured to sides of ship	between double frames.	
Rider Plate	10 x 10	10 x 10	Size of Vertical Angle Irons	3 x 3 x 7/16 and distance apart	30 ins.
Bulb Plate to Intercostal Keelson	4 1/2 3 7	4 1/2 3 7	Are the outside Plates doubled two spaces of Frames in length?	yes.	
Angle Irons	6	6			
Double Angle Iron Side Keelson	4 1/2 3 7	4 1/2 3 7			
Side Intercostal Plate	120	120			
do. Angle Irons	4 1/2 3 7	4 1/2 3 7			
Attached to outside plating with angle iron	4 1/2 3 7	4 1/2 3 7			
BILGE Angle Irons	4 1/2 3 7	4 1/2 3 7			
do. Bulb Iron	4 1/2 3 7	4 1/2 3 7			
do. Intercostal plates riveted to plating for length	4 1/2 3 7	4 1/2 3 7			
BILGE STRINGER Angle Irons	4 1/2 3 7	4 1/2 3 7			
Intercostal plates riveted to plating for length	4 1/2 3 7	4 1/2 3 7			
SIDE STRINGER Angle Irons	4 1/2 3 7	4 1/2 3 7			

Transoms, material. Knight-heads. Hawse Timbers. plates & angles

Windlass Iron. W B Thompson Patent. (Indicator)

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6" apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to 6' above hold Stringer and to upper deck 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 in. diameter, averaging 4 7/8 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 3/8 ins. from centre to centre.

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

Butts of two Strakes at Bilge for half length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.

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

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

Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.

Breadth of laps of plating in double riveting 4 1/2. Breadth of laps of plating in single riveting 2 3/4 ins.

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

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

Beams of the various Decks, how secured to the sides? Solid welded knees. No. of Breasthooks, 4 Crutches, 3

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

Manufacturer's name or trade mark, Ramsay & Co. Glasgow. Plates, Stockton Mallico. Angles & Bulbs, Hopkins & Co. Rivets, Bell & Co. Glasgow.

The above is a correct description.

Builder's Signature, J. M. R. Thompson Surveyor's Signature, J. H. M. M. M.

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, except in a few cases.*  
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 in the butts.*

*17389. Jan.*

State also Length and Diameter of Lower Masts and Bowsprit *Fore & main masts & Bowsprit two plates in the round.*

Main - " - " - " - 65-10. - " - " - " - " - " - " - " - " - " - " - "

Truett of P. pine 20 ft long 65 1/2 ft; diam at partners 17 inches.

Bosporit. Fairs 29 ft, outside bed 18 ft, at Keel 19 x 5/16, at bed 23 x 4/16; at Head 15 x 5/16. diaphragm  
plate 4 1/2 ft long 7/16 thick.

Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has 1-22 ft Long Boats and 1-21 ft sig & 1-22 <sup>m</sup> olly <sup>m</sup> olly.  
The Windlass is Good & efficient Capstans 28: Good and Rudder efficient Pumps 2 main (Thompsons) Good & efficient

**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? —

Scummers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *She has 3 pair of Scummers*

and 3 pair of breeding Scuttlers.

Cargo Hatchways.—How formed? *Plates & angles & Carlings - Plates to Fore & Aft: 9/16-7/16. to main 7/16-9/16.*

State size **Main Hatch** 14-6" x 8-9". **Forehatch** 5-5" x 5-5". **Quarterhatch** 7-0" x 6-0".

If of extraordinary size, state how framed and secured? *as above noted.*

What arrangement for shifting beams? *gull depth shifting beam 7/16" thick to main hatch.*

**Hatches.** If strong and efficient? Yes.

Order for Special Survey No. <u>341</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>1876. Specially Surveved</u> <u>May 26, June 15. 17-20; July 12-20</u> <u>24; Aug 4-11-15-18-25-30; Sept</u> <u>6-11-19-28; Oct 6-10-16-17-20-27</u> <u>30-31; Nov 6-7-10.</u>
Date <u>26 May 76.</u>		2nd. On the plating during the process of riveting	
Order for Ordinary Survey No. <u>-</u>		3rd. When the beams were in and fastened, } and before the decks were laid, . . . }	
Date <u>-</u>		4th. When the ship was complete, and before the plating was finally coated or cemented. }	
No. <u>18</u> in builder's yard.		5th. After the ship was launched and equipped	

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

This vessel has been constructed in accordance with the accompanying Drawings of Midship Section and Long. plan submitted and approved Sec Secty's Letter 3 April 1876.

She has a Raised Deck 42½ ft from post with beams of 6" x ¾" and double angles 2½" x 2½" x 5/16", stringer 3½" x 5/16", tie plates 9" x 5/16" and floor of deck 3 thick. Has a monkey foretell 19 ft long with frames run up in way of it, beams of single angles 5" x 2", 5" x 3" x 5/16", stringer plate 3" x 5/16", tie plates 12" x 5/16" and platform 2½" thick.

W. B. Thompson

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of ~~poop~~ <sup>mainmast</sup>, forecabin, <sup>19th</sup> raised quarter deck, and the length of double, or part double bottom. <sup>42 1/2 ft to post.</sup>

How are the surfaces preserved from oxidation? Inside *Cemented to upper part of Ridge and above with 3 coats of* Outside *3 coats of paint and 1 of Comp. on bottom & four coats of paint*

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

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

Special ... £30 : 4 : 0 13 Nov 1876

Certificate ... *Required* -

(Travelling Expenses, if any, \$ ☒ ).

Committee's Minute 1<sup>st</sup> Nov 18 1874

Committee's Attitude

Character assigned

1890

2000