

IRON SHIP

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

On the Bk. "Melchan" Master James Cairnes.

TONNAGE under Tonnage Deck } 602-23 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, or Awning Deck. } SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Poop, or Raised Qr. Dk. } Bk 30-11 HALF BREADTH (moulded)... .. 14-25
 Ditto of Houses } 2-08 DEPTH from upper part of Keel to top of Upper Deck Beams 19-33
 Safe Comings } 1-44 GIRTH of Half Midship Frame (as per Rule) 29-41
 Ditto of Forecastle } Gross Tonnage 635-86 1st NUMBER 62-99
 Less Crew Space } 31-42 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
 Less Engine Room } 2nd NUMBER 10960-3
 Register Tonnage } 604-44 LENGTH 144-0
 as cut on Beam } PROPORTIONS—Breaths to Length 10960-3
 Depths to Length—Upper Deck to Keel 9
 Main Deck ditto over 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.

PLANS MADE

Official Number 45793

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 ... 2 No. of Tiers of Beams ... 2

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

	Inches in Ship.			Inches per Rule.		
	Inches.	16ths.	Inches.	Inches.	16ths.	Inches.
KEEL, depth and thickness	7 1/2	2 1/4	7 1/2	2 1/4	7 1/2	2 1/4
STEM, moulding and thickness	7	2 1/4	7	2 1/4	7	2 1/4
STERN-POST for Rudder do. do.	7	2 1/4	7	2 1/4	7	2 1/4
Distance of Frames from moulding edge to moulding edge, all fore and aft	22			22		
FRAMES, Angle Iron, for 2/3 length amidships	4	3	4	3	4	3
Do. for 1/3 at each end	4	3	4	3	4	3
REVERSED FRAMES, Angle Iron	3	3	3	3	3	3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	18	8	18	8	18	8
thickness at the ends of vessel	7			7		
depth at 2/3 the half-bdth. as per Rule	9 1/2		9		9	
height extended at the Bilges	36		36		36	
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	6 1/2	6	6 1/2	6	6 1/2	6
Single or double Angle Iron on Upper edge	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Average space	44			44		
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	7	7	7	7	7	7
Single, or double Angle Iron, on Upper Edge	3	3	3	3	3	3
Average space	22 1/4			22 1/4		
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	7	7	7	7	7	7
Single or double Angle Iron on Upper Edge	3	3	3	3	3	3
Average space	22 1/4			22 1/4		
KEELSONS Centre line, single or double plate, box, or intercostal, Plates	12	10	12	10	12	10
Rider Plate	10	10	10	10	10	10
Bulb Plate to Intercostal Keelson	4 1/2	3	4 1/2	3	4 1/2	3
Angle Irons	4 1/2	3	4 1/2	3	4 1/2	3
Double Angle Iron Side Keelson	6		6		6	
Side Intercostal Plate wash plates						
do. Angle Irons	12		12		12	
Attached to outside plating with angle iron	12		12		12	
BILGE Angle Irons	4 1/2	3	4 1/2	3	4 1/2	3
do. Bulb Iron	4 1/2	3	4 1/2	3	4 1/2	3
do. Intercostal plates riveted to plating for length	4 1/2	3	4 1/2	3	4 1/2	3
BILGE STRINGER Angle Irons	4 1/2	3	4 1/2	3	4 1/2	3
Intercostal plates riveted to plating for length	4 1/2	3	4 1/2	3	4 1/2	3
SIDE STRINGER Angle Irons						

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule.	16ths. per Rule.
Flat Keel Plates, breadth and thickness	33	9	32	9
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
fm up. part of Bilge to lr. edge of Sh'rstrake		8		8
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	33	10	33	10
Up. or Spar Dk Sh'rstrake, brdth & thickness	16 1/2	7/8	14 1/2	7/8
Butt Straps to outside plating, breadth & thickness	5	5	5	5
Lengths of Plating	5 frame spaces.			
Shifts of Plating, and Stringers	2 frame spaces.			
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	32 1/2	8	32	8
Angle Iron on ditto	4 1/2	3	4 1/2	3
Tie Plates fore and aft, outside Hatchways	9	8	9	8
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling				
Waterways do. do.	Gutter.			
Flat of Upper Deck do. do.	3 1/2			
How fastened to Beams	Gutter. 5/16			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	23	7	23	7
Is the Stringer Plate attached to the outside plating?	yes.			
Angle Irons on ditto, No.	3 1/2	3 1/2	3 1/2	3 1/2
Stringer or Tie Plates, outside Hatchways	9	8	9	8
Flat of Lower Deck	Batten 6 x 2 Six pine			
Ceiling betwixt Decks, thickness and material in hold	2 1/2 R. pine.			
Main piece of Rudder, diameter at head	4 1/2		4 1/2	
do. at heel	2 3/4		2 3/4	
Can the Rudder be unshipped afloat?	yes.			
Bulkheads No. one Thickness of	6/16.		5/16	
Height up	20 upper deck.			
How secured to sides of ship	between double frames.			
Size of Vertical Angle Irons	3 x 3 x 7/16 and distance apart 30 ins.			
Are the outside Plates doubled two spaces of Frames in length?	yes.			

Transoms, material. Knight-heads. Hawse Timbers. plates & angles
 Windlass Iron. W B Thompson's 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 bulkhead 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. plates, Stockton malleable angles & bulbs, Hopkins's Bulbs & Co. rivets, Bell & Co. plates, Bell & Co. plates.

The above is a correct description.
 Builder's Signature, Jas. W B Thompson Surveyor's Signature, J H Smith
 Surveyor to Lloyd's Register of British and Foreign Shipping.

