

IRON SHIPS.

Rec 18/11/72

No. 3026 Survey held at West Hartlepool Date, First Survey 24th July 1871 Last Survey 15th Jan 1872

On the Steamer "Maud" Master Britton

Age under Image Deck } 1003.41 of Third Spar, Awning Deck } of Poop, or used Gr. Dk. } 257.16 of Houses } Deck.... } 2.77 of Forecastle } 31.54 Tonnage } Cr. Space, } 1294.00 as per Rule } 137.44 Register Tonnage, } 1257.43 at on Beam... } Room } 414.36 Register Tonnage, as a } 843.07 Steamer, on Beam }	ONE, OR TWO DECKED, SPAR, OR AWNING- DECKED VESSELS. Half moulded breadth... Depth from upper part of Keel to top of Upper Deck Beams... 32-2 Girth of Half Mid-ship Frame (as a rule)... 32-2 1st Number... 67-0 Length... 233-2 2nd Number... 18778 Depths to Length... 18	THREE DECKED VESSELS. Half Moulded Breadth... Total Depth if three or more Decks... Total Girth of Half Mid- ship Frame... 3rd Number... Length... 4th Number... Breadths to Length... 8	Built at <u>West Hartlepool</u> When built <u>1871</u> Launched <u>9th Dec 1871</u> By whom built <u>Denton Gray & Co.</u> Owners <u>Shos Marwood & Sons</u> Port belonging to <u>Whitby</u> Destined Voyage <u>Calcutta</u> If Surveyed while Building, Afloat, or in Dry Dock.
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Length on deck as per Rule, 233	Feet. 233	Inches. 2	Moulded Breadth, 31	Feet. 31	Inches. 10	Depths from top of Floors to Upper and Main Deck Beams, as per Rule, 17	Feet. 17	Inches. 10	Horse. 120	No. of Decks with flat laid On	No. of Tiers of Beams Two
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Dimensions of Ship per Register, length, 234.0 breadth, 32 - depth, 17-0

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	9 x 2 1/2	9 x 2 1/2	8 x 2 1/2	8 x 2 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2
Do. if centre through plate, depth and thickness	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	8 x 2 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2
Stem, if bar iron, moulding and thickness	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2
Stern-post for Rudder do. do.	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2
Stern-post for Propeller	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2	9 x 4 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	23	23	23	23	23	23	23
Frames, size of Angle Iron, for 2/3 length amidships	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3
Do. for 1/3 at each end	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3	4 x 3
Reversed Frames, size of Angle Iron	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1
Do. at the ends	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1	21 x 1
Do. do. do. at Bilge Keelson	16	16	16	16	16	16	16	16
Do. height extended at the Bilges	42	42	42	42	42	42	42	42
Beams, Upper, Spar, or Awning Deck (No. 50) single or double Angle Iron, Plate or Tee Bulb Iron	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6
Single or double Angle Iron on Upper edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Average space	46	46	46	46	46	46	46	46
Beams, Main or Middle Deck (No.) single, or double Angle Iron, Plate or Tee Bulb Iron	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6
Single, or double Angle Iron, on Upper Edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Average space	46	46	46	46	46	46	46	46
Beams, Lower Deck, Hold or Orlop (No. 33) single or double Ang. Iron, Plate or Tee Bulb Iron	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6
Single or double Angle Iron on Upper Edge	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Average space	46	46	46	46	46	46	46	46
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates	14 1/2 x 12 1/6	14 1/2 x 12 1/6	14 1/2 x 12 1/6	14 1/2 x 12 1/6	14 1/2 x 12 1/6	14 1/2 x 12 1/6	14 1/2 x 12 1/6	14 1/2 x 12 1/6
Do. Bulb Plate to Intercoastal Keelson	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Do. Size of Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Do. Side Intercoastal Keelson, size of Plates	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Do. Angle Irons on tops of Floors	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Do. Bilge Keelson, Bulb Iron	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6	7 1/2 x 7 1/6
Do. do. Intercoastal plates riveted to plating for length	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Do. do. Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Side Stringers (No. one) size of Angle Irons	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2
Do. Intercoastal plates riveted to plating for length	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2	5 x 3 1/2

Transoms, material Plank or, if none, in what manner compensated for.

Knight-heads Plank Hawse Timbers Plank

Windlass Emerson Pall Bitt Plank

The Frames extend in one length from Keel to Gunnwale

The Reverse Angle Irons on the floors and frames extend across the middle line to the Keel and to Gunnwale alternately

Keelsons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes

Plates; Garboard, double or Single Riveted to Keel, double or Single at upper edge, with Rivets (1/8 in.) diameter, averaging (5 1/2 ins.) from centre to centre.

Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or Single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/4 ins.) from centre to centre.

Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (10 x 1/2) thick, double or Single Riveted; with Rivets (3/4 in.) diameter averaging (3 1/4 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? Over

Do. Strakes at Bilge for Half length, treble riveted with Butt Straps 1/16 thicker than their plates. Five butts were capped & better riveted.

Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (1/8) thick, or clencher, double or Single riveted; with rivets (3/4 in.) diameter, averaging (3 1/4 ins.) from centre to centre.

Edges of Sheerstrake, Main, double or Single Riveted. Upper, double or Single Riveted. At upper edge Single At lower edge Double

Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (10 x 1/2) thick, double or Single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/4 ins.) from centre to centre.

Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for Half length amidships. Breadth of laps of plating in double Riveting (4 3/4) Breadth of laps of plating in single Riveting (2 3/4)

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or Single Riveted? Double & Treble

Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? Quid turned & pieces welded No. of Breasthooks, Five Crutches, Three

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

Manufacturer's name or trade mark, Thorne Iron Works, Hartlepool

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, Wm Denton, Gray & Co Surveyor's Signature, J. P. Gladstone

Rob. Gray

6510-057021

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
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid in the length
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes
Are there any rivets which either break into or have been put through the seams or butts of the plating? A few in butts

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the 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 Main Mast 65 ft. Diameter 20 in. Fore Mast 69 ft. Diameter

9711 Iron

Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test as per Certificate.	W't req'd per Rule.	Test req'd per Rule.
SAILS.											
Fore Sails,						Bowers	3	21-1-0	21-10-0-0	21-0-0	21-12-0-0
Fore Top Sails,						(State Machine where Tested, and name of Superintendent).		21-0-13	21-11-1-14	21-0-0	21-12-0-0
Fore Topmast Stay Sails						Stream	1	18-1-14	19-6-2-7	18-0-0	19-0-0-0
Main Sails,								8-3-14		9-0-0	
Main Top Sails,						Kedges	2	4-2-2		4-2-0	
								2-1-11		2-1-0	

Her Standing and Running Rigging Wire sufficient in size and Good in quality. She has Five Long Boats and Good Pumps 2 of Metal 7 inch
The present state of the Windlass is Good Capstan 20 in and Rudder Good
Engine Room Skylights.—How constructed? 3 in. Oak 1/4 in. Glass How secured in ordinary weather? Bulls eyes
What arrangements are there for deadlights in such for bad weather? 3 Bulls eyes
Coal Bunker Openings.—How constructed? Iron How are lids secured? Clasps How high above deck? 12 in.
Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? 100 in. in bulwark

Cargo Hatchways.—How formed? 7/16 Plate State size Fore Hatch 11 ft x 8 ft 6 in. Aft Hatch 19 ft 6 in x 8 ft 6 in
If of extraordinary size, state how framed and secured? As above
What arrangement for shifting beams? 7/16 Plate in Centre the whole depth of beams
Hatches, themselves, whether strong and efficient? Good Main Hatchways.—State size 23 ft x 12 ft 6 in height of beams 8 ft 6 in

Order for Special Survey No. 383 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Special Survey
Date 25 May 1871 Surveys held 2nd. On the plating during the progress of riveting Seen twice each
Order for Ordinary Survey No. while building 3rd. When the beams were in and fastened, and before the decks were laid week during
Date as per 4th. When the ship was complete, and before the plating was finally coated or cemented building.
No. 123 in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks, Is fitted with Pop. frames all to the top height, beams of single angles 5 x 3 1/2 x 9/16. Deck beams 7 x 7/16 built with single angles in top edges 5 x 3 1/2 x 7/16. Stringers on ends of beams 2 1/2 x 7/16. Angles on 20. 3 1/2 x 13 x 7/16. Tie plates 8 1/4 x 7/16. Plating outside 6/16. Deck 3 1/2 Pine Waterways 10 1/2 Pine.
Forecastle frames all to top height, beams of single angles 5 x 3 1/2 x 9/16. Three of them built 7 x 7/16. Single angles in top edges 5 x 3 1/2 x 9/16. Stringer plates on ends of beams 20 x 6/16. Tie plates 9 x 9/16. Plating outside 5/16 Deck 3 in Pine.
Iron main deck fitted over Engine & boiler space length 42 ft. 6/16 plate riveted to beams.

Water ballast tanks fitted in fore & after hold. frames cut off connection made with Pine plates, side plates 7/16. Angles on 20. 3 1/2 x 3 1/2 x 7/16. Web plates 6/16. Angles on 20. 3 x 3 x 6/16. Top plating 4/16.

For J. Denton, Gray & Co
Ld. Gray

Length 99 ft 6 in Length 20 ft 6 in

State if one, two or three decked vessel, or if spar or running decked, and lengths of poop, fore-castle or raised quarter deck, or of double or part double bottom Black Barn
In what manner are the surfaces preserved from oxidation? Inside Cemented with Portland Cement Outside Other parts Paint

I am of opinion this Vessel should be Classed 100 A1
The amount of the Entry Fee £ 5 : 0 : 0 is received by me,
Special £ 56 : 8 : 6
Certificate : : :
(Travelling Expenses)
(if any) £

Committee's Minute 19th January 1872
Character assigned 100 A1

I concur in the recommendation to Class this vessel
190 A1
1870 Rules
18/1/72
Lloyd's Register Foundation