

IRON SHIPS.

No. 3070 Survey held at West Hartlepool Date, First Survey 1st November 1871 Last Survey 8th May 1872

On the Screw Steamer "Douglas" "Sakkara" Master Luty

Tonnage under Tonnage Deck } 882.66	ONE, OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.	Built at West Hartlepool
Ditto of Third Spar, or Awning Deck } 422.44	Half moulded breadth	Half Moulded Breadth 16-2	When built 1872 Launched 27 th March
Ditto of Poop, or Raised Or. Dk. } 1305.10	Depth from upper part of Keel to top of Upper Deck Beams	Total Depth if three or more Decks 25-6	By whom built Denton Gray & Co.
Ditto of Houses on Deck 30.99	Girth of Half Midship Frame (as per Rule)	Total Girth of Half Midship Frame 37-0	Owners George Pagan & Co.
Ditto of Forecastle 35.92	1st Number	3rd Number 7	Port belonging to West Hartlepool
Gross Tonnage 1372.01	Length	Length 23-8	Destined Voyage Cape of Good Hope
Net Space, as per Rule } 60.18	2nd Number	4th Number 17102	If Surveyed while Building, Afloat, or in Dry Dock.
Register Tonnage, as a Steamship cut on Beam } 1311.83	Depths to Length. Within 10 Main Deck " 13	Breadths to Length 7 1/2	

PLANS CASE

Length on deck as per Rule, Feet. 130, Inches. 0 Moulded Breadth, Feet. 32, Inches. 4 Depths from top of Floors to Upper and Main Deck Beams, as per Rule, Feet. 23, Inches. 10 Power of Engines, 140 Horse. N^o. of Decks with flat laid Two N^o. of Tiers of Beams Three

Dimensions of Ship per Register, length, 259-8 breadth, 32-4 depth, 25-5

	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.	16ths required per Rule.	10ths required per Rule.
Keel, if bar iron, depth and thickness	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	36	11/16
Do. if centre through plate, depth and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	36	11/16
Stem, if bar iron, moulding and thickness	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	36	11/16
Stern-post for Rudder do. do.	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	36	11/16
Stern-post for Propeller	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	10 x 4 1/2	36	11/16
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	24	24	24	24	24	24	36	11/16
Frames, size of Angle Iron, for 3/4 length amidships	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	36	11/16
Do. for 1/2 at each end	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	36	11/16
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	36	11/16
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	20 x 9/16	20 x 9/16	36	11/16						
Do. at the ends	20 x 9/16	20 x 9/16	36	11/16						
Do. do. do. at Bilge Keelson	17 x 9/16	17 x 9/16	36	11/16						
Do. height extended at the Bilges	40	40	40	40	40	40	40	40	36	11/16
Beams, Upper, Spar, or Awning Deck (No. 60) single or double Angle Iron, Plate or Tee Bulb Iron	6 1/2 x 6/16	6 1/2 x 6/16	6 1/2 x 6/16	6 1/2 x 6/16	6 1/2 x 6/16	6 1/2 x 6/16	6 1/2 x 6/16	6 1/2 x 6/16	36	11/16
Single or double Angle Iron on Upper edge	2 1/2 x 2 1/2	2 1/2 x 2 1/2	2 1/2 x 2 1/2	2 1/2 x 2 1/2	2 1/2 x 2 1/2	2 1/2 x 2 1/2	2 1/2 x 2 1/2	2 1/2 x 2 1/2	36	11/16
Average space	40	40	40	40	40	40	40	40	36	11/16
Beams, Main or Middle Deck (No. 50) single or double Angle Iron, Plate or Tee Bulb Iron	8 x 8/16	8 x 8/16	36	11/16						
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	36	11/16
Average space	40	40	40	40	40	40	40	40	36	11/16
Beams, Lower Deck, Hold or Orlop (No. 25) single or double Angle Iron, Plate or Tee Bulb Iron	8 x 8/16	8 x 8/16	36	11/16						
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	36	11/16
Average space	40	40	40	40	40	40	40	40	36	11/16
Keelson Centre line, single or double plate, box, or Intercostal, size of Plates	16 x 12/16	16 x 12/16	36	11/16						
Do. Bulb Plate to Intercostal Keelson	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	36	11/16
Do. Size of Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	36	11/16
Do. Side Intercostal Keelson, size of Plates	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	36	11/16
Do. Angle Irons on tops of Floors	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	36	11/16
Do. Bilge Keelson, Bulb Iron	8 x 8/16	8 x 8/16	36	11/16						
Do. do. Intercostal plates riveted to plating for half length	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4	36	11/16
Do. do. Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	36	11/16
Side Stringers (No. one) size of Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	36	11/16
Do. Intercostal plates riveted to plating for length	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	36	11/16

Transoms, material Plate or, if none, in what manner compensated for. Knight-heads Plate Hawse Timbers Plate Windlass Gurney & Wallers Pall Bitt

The Frames extend in one length from Keel to Gunwale Riveted through plates with (3/4 in.) Rivets, about 16 apart. The Reverse Angle Irons on the floors and frames extend across the middle line to above main deck stringers and to Gunwale 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 Riveted to Keel, double or at upper edge, with Rivets (1/8 in.) diameter, averaging (5/8 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 (3/2 ins.) from centre to centre. Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1/2 x 1/2) thick, double or single Riveted; with Rivets (3/4 in.) diameter averaging (3/4 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No. Do. of three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than their plates. 5 butts lapped & treble riveted. Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single riveted; with rivets (3/4 in.) diameter, averaging (3/2 ins.) from centre to centre. Do. Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge Single At lower edge Double Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (10 x 9/16) thick, double or single Riveted; with Rivets (3/4 in) diameter, averaging (3/2 ins) from centre to centre. Do. 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 1/2) 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? Ends turned & Pines Welded No. of Breasthooks, Six 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, Hopkin's & Co. Hartlepool Name Iron Works.

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

Builder's Signature, Denton Gray & Co. Surveyor's Signature, S. J. Clark & Co.

180451-0087

Lloyd's Register Foundation

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? They do
 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 one 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 69 ft - 3 Diameter 21 in. Fore Mast 75 ft. Diameter

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'ght req'd per Rule.	Test req'd per Rule.
SAILS.											
Fore Sails,	300	1 1/2	51-4-1-11	1 1/2	51-5-11-11	Bowers	3	27-8-4	26-19-2-21	27-8-0	26-18-0-0
Fore Top Sails,			At Low Walker 11 1/2 x 14 1/2		March 1872	(State Machine where Tested, and name of Superintendent).		27-3-0	26-18-3-0	27-3-0	26-18-0-0
Fore Topmast Stay Sails,	60	1 1/2	Robert Buxell Superintendent			Stream	1	23-8-24	23-17-2-0	23-2-11	23-10-00
Main Sails,	90	8						1072.	John Hartwick - Robert Buxell, Super	11-00	
Main Top Sails,	100	10 1/2				Kedges	2	15-2-21		15-2-0	
	100	15 1/2						3-2-6		2-8-0	
	80	15									

Her Standing and Running Rigging Wire sufficient in size and Good in quality. She has Five Long Boats and Good

The present state of the Windlass is Good Capstan 2 of Iron and Rudder Good Pumps Three of Yinch metal

Engine Room Skylights.—How constructed? 3 1/2 Teak 4 beams to top How secured in ordinary weather? Bullseyes

What arrangements are there for deadlights in such for bad weather? Bullseyes

Coal Bunker Openings.—How constructed? Iron beamings How are lids secured? Wares How high above deck? 12 inches

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? ports in bulwark

Cargo Hatchways.—How formed? 7/16 Plate State size 20 x 11 ft. height of comings 32 inch

If of extraordinary size, state how framed and secured? Double angles on top edges

What arrangement for shifting beams? 7/16 Plate in Centre the whole depth of comings

Hatches, themselves, whether strong and efficient? Good Main Hatchways.—State size 24 ft 4 x 11 ft. height of beam

Order for Special Survey No. 321 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought. Special Survey
 Date 31st Aug 1871 Surveys held 2nd. On the plating during the progress of riveting seen in all
 Order for Ordinary Survey No. _____ while building 3rd. When the beams were in and fastened, and before the decks were laid Stages during
 Date _____ as per 4th. When the ship was complete, and before the plating was finally coated or cemented Building
 No. 125 in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks, Is fitted with Forecastle, frames all to the top height. Beams of single Ang 5+4+9/16. two of them built iron 7+7/16. Single Angles on top edges 5+4+9/16. Stringers on ends 2+ Angles on so. 3 1/2 x 3+7/16. Tie plates 8+6/16. Deck 13 in y. Pine. Waterway Pitch 1/2 in Pine. Plating outside 5/16. Waterballast tanks fitted in fore & after hold frames cut off connection made with three plates, side plates 7/16 Angles on so. 3 1/2 x 3 1/2 + 7/16. Web plates 6/16. Ang on so. 3+3+6/16. Top plating 6/16

Center Gray
Do to Plating
207 2 1/2

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

In what manner are the surfaces preserved from oxidation? Inside Plat cemented with Portland Cement Outside Paint + black

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,

Special £ 57 : 15 : 6

Certificate : :

(Travelling Expenses) (if any) £ _____

Committee's Minute 14th May 1872

Character assigned 100 A 1

See Secretary letter 21st June 1871

