

IRON SHIPS.

No. 1026 Survey held at Newcastle Date, First Survey 12 June 21 Last Survey 31 May 1872
 On the S.S. H.P. STEPHENSON Master Doole

Rec'd 13/6/72

54 units

Tom. under Tonnage Deck } <u>875.53</u>	ONE OR TWO DECKED, SPAR, OR AWNING DECKED VESSELS.	THREE DECKED VESSELS.	Built at <u>Newcastle</u>
Ditto of Third Spar, or Lower Deck. } <u>31.62</u>	Half moulded breadth <u>14.3</u>	Half Moulded Breadth....	When built <u>1871</u> Launched <u>14 November 71</u>
Ditto of Poop, or Raised Qr. Dk. } <u>21.79</u>	Depth from upper part of Keel to top of Upper Deck Beams <u>19.0</u>	Total Depth if three or more Decks	By whom built <u>J.W. Richardson & Co</u>
Ditto of Houses on Deck.... } <u>13.63</u>	Girth of Half Midship Frame (as per Rule) .. <u>29.0</u>	Total Girth of Deck and ship Frame	Owners <u>General Screw Collier Coy</u>
Ditto of Forecastle <u>18.96</u>	1st Number <u>62.3</u>	3rd Number	Port belonging to <u>London</u>
Gross Tonnage <u>961.57</u>	Length <u>228</u>	Length	Destined Voyage <u>London</u>
Crew Space, as per Rule } <u>29.81</u>	2nd Number.... <u>14200</u>	4th Number	If Surveyed while Building, Afloat, or in Dry Dock.
Register Tonnage, as a Steamer, cut on Beam } <u>307.68</u>	Depths to Length. <u>12.</u>	Breadths to Length <u>157.7</u>	<u>While building</u>

Length on deck as per Rule, 228 Feet. Inches. Moulded Breadth, 28 Feet. Inches. 9 Depths from top of Floors to Upper and Main Deck Beams, as per Rule 7 Feet. Inches. 7 Power of Engines, 120 Horse. N° of Decks with flat laid ONE N° of Tiers of Beams TWO

Dimensions of Ship per Register, length, 230 breadth, 28.9 depth, 17.8

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	<u>8 x 2 3/8</u>	<u>8 x 2 3/8</u>	Flat Keel Plates, breadth and thickness		
Do. if centre through plate, depth and thickness	<u>7 1/4 x 2 3/8</u>	<u>7 1/4 x 2 3/8</u>	Plates in Garboard Strakes, breadth and thickness	<u>30</u>	<u>9</u>
Stem, if bar iron, moulding and thickness	<u>8 1/2 x 4 3/4</u>	<u>7 1/4 x 4 3/4</u>	Do. from Garboard to upper part of Bilges ..	<u>8</u>	<u>8 1/6</u>
Stern-post for Rudder do. do.	<u>23</u>	<u>23</u>	Do. of doubling at Bilge, or increased thickness, and length applied <u>1/2 length</u>	<u>10</u>	<u>2 1/2</u>
Stern-post for Propeller			Do. fm up. part of Bilge to lr. edge of Sh'rstrake	<u>8</u>	<u>8 1/6</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft			Do. Main Sheerstrake, breadth and thickness	<u>30</u>	<u>18</u>
Frames, size of Angle Iron, for 1/2 length amidships	<u>4 x 3 7/16</u>	<u>4 x 3 7/16</u>	Do. of d'bling at Sh'rstrake, & length applied		<u>30 x 13/16</u>
Do. for 1/4 at each end	<u>4 x 3 7/16</u>	<u>4 x 3 7/16</u>	Do. from Mn. to Up. or Spar Dk. Sh'rstrake.		
Reversed Frames, size of Angle Iron	<u>3 x 3 6</u>	<u>3 x 3 6</u>	Do. Up. or Spar Dk. Sh'rstrake, brdth & thickness		
Floors, depth and thickness of Floor Plate at mid line for half the length amidships.....	<u>19 x 9</u>	<u>19 x 9 1/6</u>	Butt Straps to outside plating, breadth & thickness	<u>9 1/2</u>	<u>8 x 10 1/2</u>
Do. at the ends	<u>19 x 8</u>	<u>19 x 8</u>	Lengths of Plating	<u>9</u>	<u>9 1/2</u>
Do. do. do. at Bilge Keelson	<u>10 x 9</u>	<u>10 x 9</u>	Shifts of Plating, and Stringers.....	<u>3</u>	<u>10</u>
Do. height extended at the Bilges.....	<u>3 x 2</u>	<u>3 feet 2 in</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness..		<u>3 feet 10 in</u>
Beams, Upper, Spar, or Awning Deck (No. 1) single or double Angle Iron, Plate or Tee Bulb Iron			Angle Iron on ditto.....		
Single or double Angle Iron on Upper edge	<u>7 x 7</u>	<u>7 x 7 1/6</u>	Tie Plates (fore and aft), outside Hatchways....		
Average space	<u>3 x 10</u>	<u>3 feet 10 in</u>	Diagonal Tie Plates on Beams (No. of Pairs,)		
Beams, Main or Middle Deck (No. 2) single, or double Angle Iron, Plate or Tee Bulb Iron	<u>2 3/4 x 2 3/4</u>	<u>2 3/4 x 2 3/4</u>	Planksheer material and scantling		
Single or double Angle Iron on Upper Edge	<u>3 x 10</u>	<u>3 feet 10 in</u>	Waterways do. do.		
Average space	<u>3 x 10</u>	<u>3 feet 10 in</u>	Flat of Upper Deck do. do.		
Beams, Lower Deck, Hold or Orlop (No. 25) single or double Ang. Iron, Plate or Tee Bulb Iron	<u>2 3/4 x 2 3/4</u>	<u>2 3/4 x 2 3/4</u>	How fastened to Beams		
Single or double Angle Iron on Upper Edge	<u>3 x 10</u>	<u>3 feet 10 in</u>	Stringer Plate on ends of Main or Middle Deck	<u>45</u>	<u>10</u>
Average space	<u>3 x 10</u>	<u>3 feet 10 in</u>	Beams, breadth and thickness	<u>45</u>	<u>10 1/6</u>
Keelson Centre line, single or double plate, box or intercostal, size of Plates.....	<u>24 x 7</u>	<u>24 x 7 1/6</u>	(Is the Stringer Plate attached to the outside plating?)		
Do. Bulb Plate to Intercostal Keelson	<u>22 x 7</u>	<u>22 x 7 1/6</u>	Angle Irons on ditto (No. 1)	<u>5 x 3 1/2</u>	<u>5 x 3 1/2 x 7 1/6</u>
Do. Size of Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2 x 7 1/6</u>	Tie Plates, outside Hatchways	<u>15</u>	<u>9</u>
Do. Side Intercostal Keelson, size of Plates	<u>5 x 3 1/2</u>	<u>5 x 3 1/2 x 7 1/6</u>	Diagonal Tie Plates on Beams (No. of pairs,)		<u>15 x 9 1/6</u>
Do. Angle Irons on tops of Floors	<u>7 x 7</u>	<u>7 x 7 1/6</u>	Waterways materials and scantlings		
Do. Bilge Keelson, Bulb Iron	<u>7 x 7</u>	<u>7 x 7 1/6</u>	Flat of Middle Deck do. do.	<u>3 1/2</u>	<u>3 1/2</u>
Do. do. Intercostal plates riveted to plating for length	<u>5 x 3 1/2</u>	<u>5 x 3 1/2 x 7 1/6</u>	How fastened to Beams		
Do. do. Angle Irons.....	<u>5 x 3 1/2</u>	<u>5 x 3 1/2 x 7 1/6</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>24</u>	<u>10</u>
Side Stringers (No. 1) size of Angle Irons	<u>5 x 3 1/2</u>	<u>5 x 3 1/2 x 7 1/6</u>	(Is the Stringer Plate attached to the outside plating?)		
Do. Intercostal plates riveted to plating for length			Angle Irons on ditto (No. 2)	<u>3 1/2 x 3 1/2</u>	<u>3 1/2 x 3 1/2 x 8 1/6</u>

Transoms, material Iron or, if none, in what manner compensated for.
 Knight-heads Iron Hawse Timbers Iron
 Windlass Iron, Patent Pall Bitt
 The Frames extend in one length from Keel to Foremast Riveted through plates with (3/4 in.) Rivets, about 6 apart.
 The Reverse Angle Irons on the floors and frames extend from the middle line to Foremast and to Foremast 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 (1/2 in.) diameter, averaging (6 1/2 ins.) from centre to centre.
 Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (3/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre.
 Do. Butts from Keel to turn of Bilge, worked Carvel with butt straps to strakes (8/16) thick, double or single Riveted; with Rivets (3/8 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? No
 Do. of 2 Strakes at Bilge for Half length, treble riveted with Butt Straps 1/16 thicker than their plates.
 Do. Edges from bilge to Main Sheerstrake, worked carvel with a lining piece (1/16) thick, or clencher, double or single riveted; with rivets (3/8 in.) diameter, averaging (3 1/4 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 (8/16) thick, double or single Riveted; with Rivets (3/8 in.) diameter, averaging (3 1/4 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 1/2 length amidships. Breadth of laps of plating in double Riveting (4 1/4) Breadth of laps of plating in single Riveting (2 1/2)
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & treble riveted as per Rule
 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? Turned down No. of Breasthooks, 4 Crutches, 3
 What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angle Walker Iron Works.
 Manufacturer's name or trade mark, Angle Walker Iron Works. Plates
 We certify that the above is a correct description of the several particulars therein given.
 Builder's Signature, William Richardson & Co Surveyor's Sign Benjamin

IRON 451-0196

10218 *Saxon*

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 fillings*

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? *Very few*

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 *✓*

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	270	1 1/2	40 1/20	18/16	40 1/20	Bowers	3	21.2.7	22	21	21 1/20
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	<i>Sigsbee</i>	<i>2 1/2</i>	<i>P. H. R. Russell</i>	<i>Sigsbee</i>	<i>Sigsbee</i>	(State Machine where Tested, and name of Superintendent).	<i>Sigsbee</i>	<i>21.1.14</i>	<i>21 1/20</i>	<i>21</i>	<i>21 1/20</i>
	Fore Topmast Stay Sails	Hempen Stream Cable	60	1 1/2				Stream	1	9.2.14		9	
	Main Sails,	Hawser	60	10		10		Kedges	2	4.1.34		4 1/2	
	Main Top Sails,	Towlines	60	7		9				2.1.0		2 1/4	
		Warp	60	6		5 1/2							
	and	All of <i>good</i> quality.											

Her Standing and Running Rigging *✓* sufficient in size and *good* quality. She has *Three* Long Boats and *✓*

The present state of the Windlass is *Secure* Capstan *✓* and Rudder *good* Pumps *good*

Engine Room Skylights.—How constructed? *For coverings* How secured in ordinary weather? *Lashed with glass*

What arrangements are there for deadlights in such for bad weather? *Iron coverings 8 ft. above main deck no deadlights.*

Coal Bunker Openings.—How constructed? *For fuel* How are lids secured? *Studs* How high above deck? *Flush*

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? *Four ports on each side*

Cargo Hatchways.—How formed? *For coverings* State size *28x12 and 13x12*

If of extraordinary size, state how framed and secured? *Properly framed with half beams*

What arrangement for shifting beams? *For shifting beams*

Hatches, themselves, whether strong and efficient? *Yes* Main Hatchways.—State size *28x12 and 13x12*

Order for Special Survey No. *828* DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought

Date *25 May 1871* Surveys held 2nd. On the plating during the progress of riveting *Build under*

Order for Ordinary Survey No. *✓* while building 3rd. When the beams were in and fastened, and before the decks were laid

Date *✓* as for 4th. When the ship was complete, and before the plating was finally coated or cemented *Special Survey*

No. *75* in builder's yard. Section 18. 5th. After the ship was launched and equipped

General Remarks,

There is a double bottom in Fore Main and After Holds of the united length of 15-9 feet. Plating of inner bottom 3/16" and flange plates 7/16" thick.

This vessel has been built in accordance with midship section attached.

Forecastle 27 feet long Poop 30 feet long

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 *Bottom coated with* Outside *Paint*

I am of opinion this Vessel should be Classed *1st GOAL (1st double bottom)*

The amount of the Entry Fee£ 0 : : : is received by me,

June 1872 Special£ 46 : 12 :
Certificate : : : :

(Travelling Expenses)
(if any) £ *✓*

Committee's Minute *June 14 1872*

Character assigned *GOAL*

L. L. H. 11/1872 T. H. H.

James Purdie
31 May 72
Concurred in the opinion that this vessel should be classed

Notes for. Rickerson 265, Newcastle, Newcastle