

## IRON SHIPS.

10051

Rec'd 9/1/73

No. 12001 Survey held at Newcastle Date, First Survey 15<sup>th</sup> April 1872 Last Survey 6<sup>th</sup> Jan 1873On the S.S. BISCAYMaster Stephenson

Tonnage under  
Tonnage Deck } 792.60  
Ditto of Third Spar,  
or Awning Deck }  
Ditto of Poop, or  
Raised Qr. Dk. } 44.72  
Ditto of Houses  
on Deck } 37.25  
Ditto of Forecastle } 27.36  
Gross Tonnage } 901.93  
Crew Space,  
as per Rule } 41.49  
Register Tonnage,  
cut on Beam } 288.62  
Engine Room } 288.62  
Register Tonnage, as a  
Steamer, cut on Beam } 571.82

ONE, OR TWO DECKED,  
SPAR, OR AWNING-  
DECKED VESSELS.

Half moulded breadth... 15.0  
Depth from upper part of  
Keel to top of Upper  
Deck Beams... 18.8  
Girth of Half Midship  
Frame (as per Rule)... 30.5

1st Number... 64.1  
Length... 202.5

2nd Number... 12976Depths to Length. under 11

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. under 7Built at NewcastleWhen built 1872 Launched 20. Sept. 72By whom built C. Mitchell & CoOwners Nelson Docking & CoPort belonging to LondonDestined Voyage Spain

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

While Building

Length on deck as per Rule, 202 Feet. 5 Inches. Moulded Breadth, 30 Feet. - Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule, 17 Feet. 2 Inches. Power of Engines, 90 Horse. No. of Decks with flat laid ONE No. of Tiers of Beams TWO

Dimensions of Ship per Register, length, 204.1 breadth, 30.2 depth, 17.1

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	<u>7 x 2 3/8</u>	<u>7 x 2 3/8</u>	Flat Keel Plates, breadth and thickness	<u>31 x 1 1/2</u>	<u>30 x 1 1/2</u>
Do. if centre through plate, depth and thickness	<u>7 x 2 3/8</u>	<u>7 x 2 3/8</u>	Plates in Garboard Strakes, breadth and thickness	<u>8 1/2</u>	<u>8 1/2</u>
Stem, if bar iron, moulding and thickness	<u>8 x 4 1/2</u>	<u>7 x 4 3/4</u>	Do. from Garboard to upper part of Bilges	<u>8 1/2</u>	<u>8 1/2</u>
Stern-post for Rudder do. do.	<u>8 x 4 1/2</u>	<u>7 x 4 3/4</u>	Do. of doubling at Bilge, or increased thick- ness, and length applied	<u>16 x 3 1/2</u>	<u>16 x 3 1/2</u>
Stern-post for Propeller	<u>22 in</u>	<u>22 in</u>	Do. fm up. part of Bilge to lr. edge of Sh'rstrake	<u>7 1/2</u>	<u>7 1/2</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>22 in</u>	<u>22 in</u>	Do. Main Sheerstrake, breadth and thickness	<u>39 x 1 1/2</u>	<u>30 x 1 1/2</u>
Frames, size of Angle Iron, for 1/2 length amidships	<u>4 x 3 x 7/16</u>	<u>4 x 3 x 7/16</u>	Do. of d'bling Sh'rstrake, & length applied	<u>7 1/2</u>	<u>7 1/2</u>
Do. for 1/2 at each end	<u>4 x 3 x 7/16</u>	<u>4 x 3 x 7/16</u>	Do. from Mn. to Up. or Spar Dk. Sh'rstrake	<u>7 1/2</u>	<u>7 1/2</u>
Reversed Frames, size of Angle Iron	<u>3 x 3 x 7/16</u>	<u>3 x 3 x 7/16</u>	Do. Up. or Spar Dk. Sh'rstrake, brdth & thickn	<u>7 1/2</u>	<u>7 1/2</u>
Floors, depth and thickness of Floor Plate at mid line for half the length amidships	<u>18 x 5/16</u>	<u>18 x 5/16</u>	Butt Straps to outside plating, breadth & thickness	<u>10-15</u>	<u>8-14 1/4</u>
Do. at the ends	<u>7 1/2</u>	<u>7 1/2</u>	Lengths of Plating	<u>SIX SPACES</u>	<u>FIVE SPACES</u>
Do. do. at Bilge Keelson	<u>7 1/2</u>	<u>7 1/2</u>	Shifts of Plating, and Stringers	<u>TWO SPACES</u>	<u>TWO SPACES</u>
Do. height extended at the Bilges	<u>7 1/2</u>	<u>7 1/2</u>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<u>29 x 5/16</u>	<u>28 x 5/16</u>
Beams, Upper, Spar, or Awning Deck (No. )	<u>5 x 3 x 5/16</u>	<u>7 x 7/16</u>	Angle Iron on ditto	<u>4 x 4 x 7/16</u>	<u>4 x 4 x 7/16</u>
single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 x 3 x 5/16</u>	<u>7 x 7/16</u>	Tie Plates (fore and aft), outside Hatchways	<u>6 1/2</u>	<u>6 1/2</u>
Single or double Angle Iron on Upper edge	<u>5 x 3 x 5/16</u>	<u>7 x 7/16</u>	Diagonal Tie Plates on Beams (No. of Pairs, )	<u>6 1/2</u>	<u>6 1/2</u>
Average space	<u>22 in</u>	<u>44 in</u>	Planksheer material and scantling	<u>Iron deck &amp; intermediate</u>	<u>Iron deck &amp; intermediate</u>
Beams, Main or Middle Deck (No. )	<u>5 x 3 x 5/16</u>	<u>7 x 7/16</u>	Waterways do. do.	<u>6 1/2</u>	<u>6 1/2</u>
single or double Angle Iron, Plate or Tee Bulb Iron	<u>5 x 3 x 5/16</u>	<u>7 x 7/16</u>	Flat of Upper Deck do. do.	<u>6 1/2</u>	<u>6 1/2</u>
Single or double Angle Iron on Upper Edge	<u>5 x 3 x 5/16</u>	<u>7 x 7/16</u>	How fastened to Beams	<u>6 1/2</u>	<u>6 1/2</u>
Average space	<u>22 in</u>	<u>44 in</u>	Stringer Plate on ends of Main or Middle Deck	<u>22 x 7/16</u>	<u>22 x 7/16</u>
Beams, Lower Deck, Hold or Orlop (No. )	<u>7 1/2 x 7/16</u>	<u>7 1/2 x 7/16</u>	Beams, breadth and thickness	<u>22 x 7/16</u>	<u>22 x 7/16</u>
single or double Angle Iron, Plate or Tee Bulb Iron	<u>7 1/2 x 7/16</u>	<u>7 1/2 x 7/16</u>	(Is the Stringer Plate attached to the outside plating?)	<u>YES</u>	<u>YES</u>
Single or double Angle Iron on Upper Edge	<u>7 1/2 x 7/16</u>	<u>7 1/2 x 7/16</u>	Angle Irons on ditto (No. )	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Average space	<u>22 in</u>	<u>44 in</u>	Tie Plates, outside Hatchways	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Keelson Centre line, single or double plate, or Intercoastal, size of Plates	<u>22 x 7/16</u>	<u>22 x 7/16</u>	Diagonal Tie Plates on Beams (No. of pairs, )	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Do. Bulb Plate to Intercoastal Keelson	<u>23 x 7/16</u>	<u>23 x 7/16</u>	Waterways materials and scantlings	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Do. Size of Angle Irons	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	Flat of Middle Deck do. do.	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Do. Side Intercoastal Keelson, size of Plates	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	How fastened to Beams	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Do. Angle Irons on tops of Floors	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>22 x 7/16</u>	<u>22 x 7/16</u>
Do. Bilge Keelson, Bulb Iron	<u>23 x 7/16</u>	<u>23 x 7/16</u>	(Is the Stringer Plate attached to the outside plating?)	<u>YES</u>	<u>YES</u>
Do. do. Intercoastal plates riveted to plating for length	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	Angle Irons on ditto (No. )	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Do. do. Angle Irons	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	Stringer or Tie Plates, outside Hatchways	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Side Stringers (No. ONE ) size of Angle Irons	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	Flat of Lower Deck	<u>3 1/2 x 3 1/2 x 7/16</u>	<u>3 1/2 x 3 1/2 x 7/16</u>
Do. Intercoastal plates riveted to plating for length	<u>4 x 4 x 7/16</u>	<u>4 1/2 x 3 1/2 x 7/16</u>	Ceiling betwixt Decks, thickness and material	<u>2 1/2</u>	<u>2 1/2</u>

Transoms, material Iron or, if none, in what manner compensated for.Knight-heads Iron Hawse Timbers IronWindlass Handspike Pall BittThe Frames extend in one length from Keel to Gunwale Riveted through plates with ( 3/4 in.) Rivets, about 8 apart.The Reverse Angle Irons on the floors and frames extend across the middle line to Gunwale on every frame and to a few at ends alternatelyKeelsons. Are the various lengths of Plates and Angle Irons properly connected? yes And are their butts properly shifted? yesPlates, Garboard, double or single Riveted to Keel, double or single at upper edge, with Rivets ( 7/8 in.) diameter, averaging ( 3 3/4 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 ( 8 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? noDo. of Two 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 ( 5/8 in.) diameter, averaging ( 2 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 DoubleDo. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps ( 7/16 ) thick, double or single Riveted; with Rivets ( 5/8 in.) diameter, averaging ( 2 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 Half length amidships. Breadth of laps of plating in double Riveting ( 4 1/4 ) Breadth of laps of plating in single Riveting ( 2 1/8 )Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and Treble 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? Nuts welded & Riveted to frames No. of Breasthooks, 4 Crutches, 3What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? angles, look Wilson & BellManufacturer's name or trade mark, plates by "Stockton" "Bristol" & "London"

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

Builder's Signature, L. C. Mitchell & Co Surveyor's Signature, James Purdie

24/2/71.

IRON 453-0059



**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 single pieces

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 in Butts only.

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 Iron Pole Mast. Fore 82 x 19 1/2 Main 75 x 19 1/2

the plates in the round 6/16 tapering to 1/4 at Pole Seams double and Butts double and Seams at Wedging - no angles - Plates made of Corbett

N <sup>o</sup> .	Number for equipment	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
	SAILS.											
	CABLES, &c.	135	1 1/2	40 1/2	17 1/2	37 1/2			21.3.0	22 1/2	18	19
	Chain	135	1 1/2	40 1/2	17 1/2	37 1/2	Bowers ....	3	21.2.12	22 1/2	18	19
	(State Machine where Tested, and name of Superintendent).						(State Machine where Tested, and name of Superintendent).					
	Fore Sails,						Stream ....	1	9.1.10		8	
	Fore Top Sails,						Kedges ...	2	2.1.10		2	
	Fore Topmast Stay Sails											
	Main Sails,											
	Main Top Sails,											
	and											

Her Standing and Running Rigging Wood Block sufficient in size and good in quality. She has medifaring Boat and Two Others

The present state of the Windlass is Harfield's Capstan one and Rudder good Pumps Three / five inch

Engine Room Skylights. How constructed? Iron cramping to Bridge beam How secured in ordinary weather? Bolted down

What arrangements are there for deadlights in such for bad weather? Deadlights in each lock

Coal Bunker Openings. How constructed? Cast Iron Frames How are lids secured? Bar across How high above deck? 9 in above Bridge

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? Deck

Five square ports on each side

Cargo Hatchways. How formed? Iron cramping State size 20 x 10 - 7 1/4 x 8 - 11 x 10

If of extraordinary size, state how framed and secured? Framed with half beams and iron cramping

What arrangement for shifting beams? Shifting Beams of Bull Iron and angles

Hatches, themselves, whether strong and efficient? yes Main Hatchways. State size See above

Order for Special Survey No. 860 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Built

Date 9 Nov. 1871 Surveys held 2nd. On the plating during the progress of riveting under special

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

Date — as per 4th. When the ship was complete, and before the plating was finally coated or cemented

No. 268 in builder's yard. Section 18. 5th. After the ship was launched and equipped Survey

**General Remarks,**

She is fitted with Double Bottom in fore and after holds - 66 feet and 51 feet in Length - 117 feet - Plating 6/16 Side plating 7/16. Length of poop 32 feet - Forecastle 30 feet -

Bissey  
Please return this section, when done with, for completion of sixth vessel.  
8/1/43 P. J. Ount  
(returned 19/8/73)

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

In what manner are the surfaces preserved from oxidation? Inside Cement in Bottom Space Outside Painted

I am of opinion this Vessel should be Classed 90 A marked St. Double Bottom

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

on 860 tons Special paid £ 43 : 0 : 0 Certificate ....

(Travelling Expenses) (if any) £ —

Committee's Minute 15th Jan 1873

Character assigned 90 A A + P

M.C.  
part double bottom

This vessel is classed 90 A as recommended  
1873  
Lloyd's Register  
Foundation

H. Moore & Co. Builders at 6, New Water Lane, New Castle-on-Tyne