

IRON SHIP.

16575
Recd 27/6/76

No. 3493 Survey held at Bungwe Date, First Survey 7-1-76 Last Survey 22 June 1876
 On the Screw Steam Ship Pinguin Master J. Marshall
 TONNAGE under Tonnage Deck } 729 05 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, or Awning Deck. }
 Ditto of Poop, or Raised Qr. Dk. } 116 63 HALF BREADTH (moulded) 14 75 Feet.
 Ditto of Houses on Deck } 15 90 DEPTH from upper part of Keel to top of Upper Deck Beams 18 08
 Ditto of Forecastle } 44 20 GIRTH of Half Midship Frame (as per Rule) 29 66
 Gross Tonnage 905 84 1st NUMBER 1500 62 49
 Less Crew Space 33 92 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
 Less Engine Room 871 93 LENGTH 233 75
 Register Tonnage as cut on Beam } 582 08 2nd NUMBER 200 146 07
 PROPORTIONS—Breadths to Length 7.92 B. 13.4
 Depths to Length—Upper Deck to Keel 7.92 D. 13.4
 Main Deck ditto 12.92 depths

Official Number
9.27
63
9

LENGTH on deck as per Rule	Feet. Inches. <u>233 9</u>	BREADTH—Moulded	Feet. Inches. <u>29 6</u>	DEPTH top of Floors to Upper Deck Beams	Feet. Inches. <u>16 4 1/2</u>	Power of Engines	Horse. <u>200</u>	N ^o . of Decks with flat laid	<u>two</u>
				Do. do. Main Deck Beams				N ^o . of Tiers of Beams	<u>two</u>

Dimensions of Ship per Register, length, 238.4 breadth, 29.8 depth, 15.9

	Inches in Ship.	Inches per Rule.						
KEEL, depth and thickness	<u>34</u>	<u>15-16</u>	<u>34</u>	<u>15-16</u>				
STEM, moulding and thickness	<u>7 1/2</u>	<u>2 3/8</u>	<u>7 1/2</u>	<u>2 3/8</u>				
STERN-POST for Rudder do. do. for Propeller	<u>9</u>	<u>4 1/4</u>	<u>9</u>	<u>4 1/4</u>				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>23</u>							
FRAMES, Angle Iron, for 1/2 length amidships	<u>4</u>	<u>3</u>	<u>4</u>	<u>3</u>				
Do. for 1/2 at each end	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>				
REVERSED FRAMES, Angle Iron	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>				
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<u>18</u>	<u>8-16</u>	<u>18</u>	<u>8-16</u>				
thickness at the ends of vessel	<u>9</u>	<u>7-15</u>	<u>9</u>	<u>7-15</u>				
depth at 3/4 the half-bdth. as per Rule	<u>9</u>		<u>9</u>					
height extended at the Bilges	<u>3.0</u>		<u>3.0</u>					
BEAMS, Upper, Spar, or Awning Deck	<u>4</u>	<u>3</u>	<u>4</u>	<u>3</u>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>				
Single or double Angle Iron on Upper edge	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>				
Average space	<u>3.10</u>		<u>3.10</u>					
BEAMS, Main, or Middle Deck	<u>7</u>	<u>7-16</u>	<u>7</u>	<u>7-16</u>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>				
Single, or double Angle Iron, on Upper Edge	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>				
Average space	<u>3.10</u>		<u>3.10</u>					
BEAMS, Lower Deck, Hold, or Orlop	<u>6 1/2</u>	<u>6-16</u>	<u>6 1/2</u>	<u>6-16</u>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>				
Single or double Angle Iron on Upper Edge	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>	<u>2 1/2</u>				
Average space	<u>3.10</u>		<u>3.10</u>					
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates	<u>18</u>	<u>9-16</u>	<u>18</u>	<u>9-16</u>				
" Rider Plate	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>				
" Bulb Plate to Intercostal Keelson	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
" Angle Irons	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
" Double Angle Iron Side Keelson	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
" Side Intercostal Plate	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
" do. Angle Irons	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
" Attached to outside plating with angle iron	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
BILGE Angle Irons	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
" do. Bulb Iron	<u>7</u>	<u>7-16</u>	<u>7</u>	<u>7-16</u>				
" do. Intercostal plates riveted to plating for length	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
BILGE STRINGER Angle Irons	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
Intercostal plates riveted to plating for length	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
SIDE STRINGER Angle Irons	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				

Transoms, material. Knight-heads. Hawse Timbers. Plates A & B
 Windlass 4 Halfpenny Ball Bit
 The FRAMES extend in one length from Center Line Main Poop to Fore Deck Stanchion Riveted through plates with 1 1/2 in. Rivets, about 7" apart. C/B
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to 4' above Lower Deck and to Main Deck alternately
 KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? well connected And butts properly shifted? well shifted
 PLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 4 1/2 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7 8 in. diameter, averaging 3 3/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7 8 in. diameter averaging 4" ins. from centre to centre.
 Butts of 3 Strakes at Bilge for 12 length, treble riveted with Butt Straps 1 1/2 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7 8 in. diameter, averaging 3 7/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7 8 in. diameter, averaging 4" 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 12 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
 Butts of Main Stringer Plate, treble riveted for 12 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
 Breadth of laps of plating in single riveting 3 1/2 diam.
 Breadth of laps of plating in double riveting 6 diam.
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? treble or double
 Waterway, how secured to Beams Gutter (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? secured to the sides by bolts No. of Breasthooks, 3 Crutches, 4
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? English & Bulb "Coates" Plating "S.V." "Connell" "Cleveland"
 Manufacturer's name or trade mark, u. J. Jackson. u. Thomas Vaughan Connell & Co Bolchaw Vaughan
 The above is a correct description.
 Pder's Signature, John May Brothers Surveyor's Signature, J. Marshall
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 16575
 Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *lay close*
 Are the fillings between the ribs and plates solid single pieces? *Solid single pieces*
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *conform well*
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *well countersunk & punched from faying surface*
 Do any rivets break into or through the seams or butts of the plating? *in a few cases way of butts*

Masts, Bowsprit, Yards, &c., are *Wood* in *Good* condition, and sufficient in size and length. If of Iron or Steel give 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
Five & Num Masts Pole Mast of Pitch Pine

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o	SAILS.	CABLES.					Bowers	2081	21.00	21.12.20	21.00	21.12.00
1	Fore Sails,	Chain	240	1 1/2	40.10.00	240 x 1 1/2		2716	21.00	17.8.70	21.00	21.12.00
1	Fore Topmast Stay Sails	Wire	29	2 1/2	58.14.00			2705	21.00	21.16.10	21.00	21.12.00
1	Main Sails,	Hmpn Strm Cbl	90	15.16	Strum	90, 15.16		2705	18.00	19.10.5.21	18.00	19.00.00
1	Main Top Sails,	Hawser	90	9"	"	9"		2705	9.00	17-3.76		
and	any on all	Towlines	32	7 1/2"	"	5 1/2"			4.20			
		Warp	32	5"					2.76			
		quality										

Standing and Running Rigging *More & kemp* sufficient in size and also in quality. She has *2 x 24"* Long Boat and *2 x 22"* of 18 ft Life

The Windlass is *Harfield's Pat 2* Capstan *4 St Crum* and Rudder *Good* Pumps *4 Deck*

Engine Room Skylights—How constructed? *23" Iron plate* How secured in ordinary weather? *as on Bridge deck*

Coal Bunker Openings.—How constructed? *Circular Castings* How are lids secured? *lock by 1/2 turn* Height above deck? *12" filled*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *11 a, 3 pair Scuppers & some w' ports*

Cargo Hatchways.—How formed? *Bull form & aft ledges with Iron plate* Combings and rails *and end end plates*

State size Main Hatch *14.0 x 9.0* Forehatch *8.0 x 5.0* Quarterhatch *14.0 x 9.0*

If of extraordinary size, state how framed and secured? *as above noted*

What arrangement for shifting beams? *Chone*

Hatches, if strong and efficient? *strong & efficient*

Order for Special Survey No. <i>328</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	7	10	11	17	18	24	27	28	(2m. 7h)
Date <i>January 76</i>		2nd. On the plating during the process of riveting	3	8	10	11	19	28	29		(2m)
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....	10	17	21	23	30				(3m)
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..	8	12	19	(4m)	12	23	26	30	(5m)
No. <i>74</i> in builder's yard.		5th. After the ship was launched and equipped	5	29	22	23	(6m)				

General Remarks (State quality of workmanship, &c.)
 This Cruisy Stern is found with full Poop and Forecastle end, also Bridge or pint Crumy deck extending over E & B's spaces with Range of Spunk Houses in line
 Forecastle 48 ft in length Poop 67 ft from Post & Bridge deck 63 ft
 Is also fitted with pint double bottom as shown in longitudinal sketch sent herewith these have been tested & found satisfactory
 Mid Section sub 11-12-75 Supply 14-12-76 & Hold Beams (with laid deck) not to be less than 6 1/2 x 6.16 Bulbs with 2 1/2 x 2 1/2 x 6.16 double angle in top edge & otherwise of arrangements & be carried out as shown in Section & completed to satisfaction with acceptable class as proposed
 23/5/76 Mr Maitell having recommended a broad plate to be run along and riveted down to Hold Beams in each side after Hatchway has been completed with an compensation of length & width of Hatchway 23 1/2 ft 36 x 8.16 applied

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

How are the surfaces preserved from oxidation? Inside *Cement in bottom & 3 Coats Oil Paint* Outside *3 Coats Oil Paint*

I am of opinion this Vessel should be Classed *100 A1*

The amount of the Entry Fee ... £ 5 : : is received by me,
 Special ... £ 43 : 12 : 0 187
 Certificate ... : :
 (Travelling Expenses, if any, £)

Committee's Minute *30 June 1876*

Character assigned *100 A1*

J. H. M. per Lloyd's Reg