

# IRON SHIP.

THURS 30 JUNE 1887

No. *6474* Survey held at *Whitby*  
On the *S.S. "Zarake"*

Date, First Survey *9<sup>th</sup> Nov. 1886*

Last Survey *24<sup>th</sup> June 1887*  
(20 visits)

Master *Henry Driver 1875-1887*

Built at *Whitby*

When built *1887* Launched *7<sup>th</sup> April 1887*

By whom built *J. Turnbull & Son*

Owners *Turner Brightman & Co.*

Residence *12 St. Helens*

Port belonging to *London*

Destined Voyage *Buenos Ayres & back*

Surveyed while Building, Afloat, or in Dry Dock.

TONNAGE under Tonnage Deck	<i>2198.25</i>	ONE, OR TWO DECKED, THREE DECKED VESSEL,
Ditto of Third Spar, Bridge or Running Deck	<i>52.71</i>	SPAR, OR AWNING DECKED VESSEL.
Ditto of Poop, or Running Deck	<i>86.22</i>	Half Breadth (moulded) ... .. <i>18.91</i>
Ditto of Houses on Deck	<i>18.01</i>	Depth from upper part of Keel to top of Upper Deck Beams <i>26.00</i>
Ditto of Forecastle	<i>10.98</i>	Girth of Half Midship Frame (as per Rule) ... .. <i>40.00</i>
Gross Tonnage	<i>2408.39</i>	1st Number ... .. <i>84.91</i>
Less Crew Space	<i>85.96</i>	1st Number, if a 3-Decked Vessel ... deduct 7 feet <i>7.00</i>
Less Engine Room	<i>2322.43</i>	Length ... .. <i>77.91</i>
Register Tonnage as out on Beam	<i>770.68</i>	2nd Number ... .. <i>23370</i>
	<i>1551.75</i>	Proportions— Breadths to Length... <i>Under 8</i>
		Depths to Length—Upper Deck to Keel... <i>Under 12</i>
		Main Deck ditto ... .. <i>Under 16</i>

LENGTH on deck as per Rule ... <i>100</i>	BREADTH—Moulded... <i>37</i>	DEPTH top of Floors to Upper Deck Beams ... <i>24</i>	Power of Engines ... <i>175</i>	N <sup>o</sup> . of Decks with flat laid <i>2</i>	N <sup>o</sup> . of Tiers of Beams <i>3</i>
Dimensions of Ship per Register, length, <i>301.2</i> breadth, <i>38</i> depth, <i>24</i>					

KEEL, depth and thickness ... .. <i>10 x 2 1/4</i>	Inches in Ship	Inches per Rule	PLATE Keel Plates, breadth and thickness ... .. <i>36</i>	Inches in Ship	16ths in Ship	Inches per Rule	16ths per Rule
STEM, moulding and thickness... .. <i>10 x 2 1/4</i>			From Garboard to upper part of Bilges... .. <i>11-12</i>				
STERN-POST for Rudder do. do. ... .. <i>10 x 6</i>			Of Bilge at Bilge, or increased thickness, and length applied <i>2 Strakes 1/2 length</i>				
" " for Propeller ... .. <i>10 x 6</i>			From up. prt of Bilge to Ir. edge of Sh'rstake... .. <i>11</i>				
Distance of Frames from moulding edge to moulding edge, all fore and aft ... .. <i>24"</i>			Main Sheerstrake, breadth and thickness... .. <i>40</i>				
FRAMES, Angle Iron, for 1/2 length amidships ... .. <i>5-3 8</i>	Inches in Ship	Inches per Rule	Of Bilge at Sh'rstake, & lng. applied				
Do. for 1/2 at each end ... .. <i>5-3 7</i>			From M'n. to Up. or Spar Dk. Sh'rstake... .. <i>40</i>				
REVERSED FRAMES, Angle Iron ... .. <i>3 1/2 3 1/2 8</i>			Up. or Spar Dk. Sh'rstake, breadth & thickness				
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... .. <i>24</i>			Butt Straps to outside plating, breadth & thickness				
thickness at the ends of vessel ... .. <i>8-7</i>			Lengths of Plating				
depth at 1/2 the half-bdth. as per Rule ... .. <i>12</i>			Shifts of Plating, and Stringers				
height extended at the Bilges... .. <i>48</i>			Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... .. <i>60</i>				
10/16 Machinery Space			Angle Iron on ditto ... .. <i>4 x 4 x 9</i>				
BEAMS, Upper, Spar, or Awning Deck			Tie Plates fore and aft, outside Hatchways				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Diagonal Tie Plates on Beams No. of Pairs				
Single or double Angle Iron on Upper edge			Flat of Up., Spar, or Awning Dk. * 1/2 Iron Wood 4" 4" 4/16				
Average space... .. <i>48</i>			How fastened to Beams <i>Riveted</i>				
BEAMS, Main, or Middle Deck			Stringer Plate on ends of Main or Middle Deck				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Beams, breadth and thickness ... .. <i>43</i>				
Single, or double Angle Iron, on Upper Edge			Is the Stringer Plate attached to the outside plating? <i>Yes</i>				
Average space... .. <i>24</i>			Angle Irons on ditto, No. <i>2</i>				
BEAMS, Lower Deck			Tie Plates, outside Hatchways ... .. <i>4 x 4 x 9</i>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Diagonal Tie Plates on Beams, No. of Pairs				
Single or double Angle Iron on Upper Edge			Flat of Middle Deck* do. <i>Iron</i>				
Average space... .. <i>48</i>			How fastened to Beams <i>Riveted</i>				
BEAMS, Hold, or Orlop			Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... .. <i>39</i>				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron			Is the Stringer Plate attached to the outside plating? <i>Yes</i>				
Single or double Angle Iron on Upper Edge			Angle Irons on ditto, No. <i>2</i>				
Average space... .. <i>48</i>			Stringer or Tie Plates, outside Hatchways				
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates			Flat of Lower Deck*				
" Rider Plate ... .. <i>12 1/4</i>							
" Bulb Plate to Intercoastal Keelson ... .. <i>16</i>							
" Angle Irons ... .. <i>6 4 9</i>							
" Double Angle Iron Side Keelson ... .. <i>6 4 9</i>							
" Side Intercoastal Plate ... .. <i>6 4 9</i>							
" do. Angle Irons ... .. <i>6 4 9</i>							
" Attached to outside plating with angle iron							
ILGE Angle Irons ... .. <i>6 4 9</i>							
" do. Bulb Iron ... .. <i>6 4 9</i>							
" do. Intercoastal plates riveted to plating for 1/2 length							
ILGE STRINGER Angle Irons ... .. <i>6 4 9</i>							
Intercoastal plates riveted to plating for 1/2 length							
DE STRINGER Angle Irons ... .. <i>6 4 9</i>							

FRAMES extend in one length from *Keel* to *Gunwale*

REVERSED ANGLE IRONS on floors and frames extend *from* middle line to *Middle Deck Stringer* and to *Gunwale* alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? *Yes* And butts properly shifted? *Yes*

PLATING. Garboard, double riveted to Keel, with rivets *1 1/8* in. diameter, averaging *5 5/8* 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 *4* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8* in. diameter averaging *3 1/2* ins. from centre to centre.

Butts of *4* Strakes at Bilge for *1/2* length, treble riveted with Butt Straps *1/16* 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 *4* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *5 1/2* 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 *1/2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *1/2* length amidships.

Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length.

Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? No. of Breasthooks, *5* Crutches, *4*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. *Angles & Butts, Roman Iron*

Manufacturer's name or trade mark, *Smith Strickland & Co. Plates, West Strickland, Steel Stringer, Bolton*

The above is a correct description.

Builder's Signature, *J. Turnbull* Surveyor's Signature, *C. W. A. W. W. W.*

Surveyor to Lloyd's Register of British and Foreign Shipping



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*  
Are the fillings between the ribs and plates solid single pieces? *Yes*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes*  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*  
Do any rivets break into or through the seams or butts of the plating? *Only a few*

Masts, Bowsprit, Yards, &c., are *Iron 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 *Foremast - 80ft long x 24" dia. Mainmast - 74ft 3" long x 24" dia. 3 Plates x 12 Round. 7/16 - 9/16 at Head & Heel. Seams double riveted. Butts triple & double. Material tested in accordance with the Rules. Material West-Strickland Iron Co.*

NUMBER & LETTER for EQUIPMENT		26902. S.	Test per Certificate.		Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS.		N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Wt req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
SAILS.	Chain	270	1 13/16	59 1/8	82 3/4	270.1 1/16	Bower Anchors	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	32.2.14	30.11.3.14	32.0.0	Tested at Liverpool 10th Jan 1887. J. Davidson
	Fore Sails,								1	32.2.0	30.10.0.0	32.0.0	
	Fore Top Sails,	75	1 13/16	34 1/8	22 3/4	75.1 1/8			1	27.2.7	26.16.3.14	27.1.0	
	Fore Topmast Stay Sails,	90	12"			90.12"	Stream Anchor		1	10.3.0	12.13.0.14	10.2.0	Tested at Liverpool 10th Jan 1887. J. Davidson
	Main Sails,	90	9 1/2			90.9 1/2			1	5.1.21	7.16.1.0	5.2.0	
	Main Top Sails, and	90	7 1/2			90.7 1/2			1	2.2.14	5.2.2.0	2.2.0	
	quality	Good					2nd Kedge.						

Standing and Running Rigging *Wire Rope* sufficient in size and *Good* in quality. She has *4* Long Boats and The Windlass is *Emerson Walker's* Capstan *Good* and Rudder *Good* Pumps *Good* *Self Hand.*

Engine Room Skylights. How constructed? *Iron & Steel* How secured in ordinary weather? *Secured*

What arrangements for deadlights in bad weather? *Strong canvas covers*

Coal Bunker Openings. How constructed? *Iron* How are lids secured? *Hatch Bars* Height above deck? *16"*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *10 Ports each side & Bulwark*

Cargo Hatchways. How formed? *Iron coverings*

State size Main Hatch *20ft x 12ft* Fore hatch *12ft x 12ft* Quarter hatch *20ft x 12ft. 2 in number*

If of extraordinary size, state how framed and secured? *Ordinary size*

What arrangement for shifting beams? *With Plates*

Hatches, If strong and efficient? *Solid Hatches*

Order for Special Survey No. *1181*

Date *Oct 19th 1886*

Order for Ordinary Survey No. *100*

Date *19th*

No. *100* in builder's yard.

- 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
  - 2nd. On the plating during the process of riveting
  - 3rd. When the beams were in and fastened, and before the decks were laid...
  - 4th. When the ship was complete, and before the plating was finally coated or cemented..
  - 5th. After the ship was launched and equipped

State dates of letters respecting this case *15th 20th 30th Oct 1886. 20th Nov 1886. 4th Feb, 10th Mar, 15th Apr, 8th June*

General Remarks (State quality of workmanship, &c.)

*Built under Special Survey in accordance with the Rules & the general arrangement & conformity with the Plans submitted & approved by the Committee & the materials & workmanship are good. Steel Stringer tested in accordance with the Rules.*

*Double Bottom tested by a head of water equal to the height of the load line & found satisfactory, Pecks tested by filling.*

*Freeboard assigned by the Committee marked upon the vessel's sides as per Circular 573. as under. Winter 4ft 10". Summer 4ft 6 1/2". Fresh water store center of Disc 5".*

State if one, two, or three decked vessel, or if open, or awning decked; and the lengths of poop, bridge, forecabin, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Cement & Paint* Outside *Paint*

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

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

Special .....£ 53: 1: 29.6.1887

(to be sent as per margin). Certificate ...

(Travelling Expenses, if any, £ 5.16.8).

Committee's Minute

Character assigned *100 A1*

*A.O.C.D. 2 Dks Iron 1 pt Iron 3 Dks Iron*

*FRIDAY 1 JULY 1887*

*It is submitted that this vessel appears to be classed + 100 A1 as recommended*

*2 Dks (1 iron 1 pt iron) 3 Dks Iron*

*D.B. (Particulars appended)*

*Lloyd's Register Foundation*