IRON SHIP.

Rec 26/7/80

No. 4434 Survey held at Whitby last at Sunderland Date, First Survey 24th Dec 1879 Last Survey 16th July 1880

On the Scr. Str "Liverpool English" Master J. Robinson

TONNAGE under Tonnage Deck	1300.02
Ditto of Third, Spar, or Awning Deck	135.33
Ditto of Poop, or Raised Qr. Dk.	137.49
Ditto of Houses on Deck	4.80
Ditto of Forecastle	15.07
Gross Tonnage	40.11
Less Crew Space	1712.82
	56.72
Less Engine Room	1656.10
Register Tonnage as cut on Beam	548.10
	1108

ONE, ~~OR TWO DECKED, THREE~~ DECKED VESSEL.
~~SPAR, OR AWNING-DECKED VESSEL.~~

	Feet.
HALF BREADTH (moulded)	16.11
DEPTH from upper part of Keel to top of Upper Deck Beams	21-7½
GIRTH of Half Midship Frame (as per Rule)	34.4½
1st NUMBER	72.11
1st NUMBER, if a **3-DECKED VESSEL**, deduct 7 feet	
LENGTH	256.4
2nd NUMBER	18689
PROPORTIONS—Breadths to Length	7½ in 33
Depths to Length—Upper Deck to Keel	within 12
Main Deck ditto	

Built at Whitby

When built 1880 Launched 22 June

By whom built Thos Turnbull & Son

Owners Geo. Pyman & Co.

Part belonging to West Hartlepool

Destined Voyage America

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

PLANS CASE

Yard Number 315

LENGTH on deck as per Rule ... Feet. 256 Inches. 4 | **BREADTH**—Moulded... ... Feet. 33 Inches. 10 | **DEPTH** top of Floors to Upper Deck Beams ..... Do. do. Main Deck Beams..... Feet. 19 Inches. 9 | Power of Engines ... ... Horse. 150 | N°. of Decks with flat laid One | N°. of Tiers of Beams Two

Dimensions of Ship per Register, length, 250-6 breadth, 34-1 depth, 19-9

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 + 2½	9 + 2½
STEM, moulding and thickness	8½ + 2½	8½ + 2½
STERN-POST for Rudder do. do.	9 + 4 3/4	8½ + 5
" for Propeller	9 + 4 3/4	8½ + 5
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24

	Inches. In Ship.	Inches. In Ship.	16ths. In Ship.	Inches per Rule (Class)	Inches per Rule	16ths per Rule
FRAMES, Angle Iron, for ⅗ length amidships	4½	3	8	4½	3	8
Do. for ⅕ at each end	4½	3	7	4½	3	7
REVERSED FRAMES, Angle Iron	3	3	7	3	3	7
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	22½	+	10+9	22½	+	10+9
" thickness at the ends of vessel			7			7
" depth at ¾ the half-bdth. as per Rule	12			11¼		
" height extended at the Bilges	4 5			4 5		
BEAMS, Upper, ~~Spar, or Awning~~ Deck ~~Single or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	8	+	8	8	+	8
~~Single or~~ double Angle Iron on Upper edge	3	3	6	3	3	6
Average space	40			40		
BEAMS, Main, or Middle Deck ~~Single or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	8	+	8	8	+	8
~~Single, or~~ double Angle Iron, on Upper Edge	3	3	6	3	3	6
Average space	40			40		
BEAMS, ~~Lower Deck, Hold, or Orlop~~ ~~Single or d'ble Ang. Iron, Plate or Tee~~ Bulb Iron	9	+	9	9	+	9
~~Single~~ or double Angle Iron on Upper Edge	4	3½	8	4	3½	8
Average space	8+10+12		frames	8-10+12		frames
KEELSONS Centre line, single ~~or double~~ plate, ~~box, or Intercostal, Plates~~	17	+	12	17	+	12
" Rider Plate	11	+	12	11	+	12
" ~~Bulb Plate to Intercostal Keelson~~						
" Angle Irons	5	4	9	5	4	9
" ~~Double Angle Iron Side Keelson~~						
" Side Intercostal Plate	23	+	8		+	8
" do. Angle Irons	5	4	9	5	4	9
" Attached to outside plating with angle iron	3	3	4	3	3	4
BILGE Angle Irons	5	4	9	5	4	9
" do. Bulb Iron	8½	+	8	8	+	8
" do. ~~Intercostal plates riveted to plating for length~~						
BILGE STRINGER Angle Irons	5	4	9	5	4	9
~~Intercostal plates riveted to plating for length~~						
~~SIDE STRINGER~~ ~~Angle Irons~~						

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule	16ths per Rule
~~Flat Keel Plates, breadth and thickness~~				
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	36	11	36	11
" ~~of doubling at~~ Bilge, ~~or~~ increased thickness, and length applied ~~Nil~~		10		10
" fm up. part of Bilge to lr. edge of Sh'rstrake.		11		11
" Main Sheerstrake, breadth and thickness ~~of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.~~	40	10	40	10
" ~~Up. or Spar Dk Sh'rstrake, brdth & thickns~~		13	40	13
Butt Straps to outside plating, breadth & thickness	9¾ + 11 5/16 + 11/16		10/16	9¾ + 11 5/16 + 11/16
Lengths of Plating	10 ft		10 ft	
Shifts of Plating, and Stringers	40		40	
Gunwale Plate on ends of ~~Awning, Spar, or~~ Upper Deck Beams, breadth and thickness	37	10	37	10
Angle Iron on ditto	5+4+9		5+4+9	
Tie Plates fore and aft, outside Hatchways	Iron Deck		Half Iron	
Diagonal ~~Tie Plates on Beams No. of Pairs~~				
~~Planksheer material and scantling~~				
Waterways do. do.				
Flat of Upper Deck do. do.	4/16	Planked over with	3½	4/16
How fastened to Beams	5/8	rivets 3	8/16	bolts
Stringer Plate on ends of ~~Main or~~ Middle Deck Beams, breadth and thickness	33	9	33	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 2	4+4+9		4+4+9	
Tie Plates, outside Hatchways	4+4+9		4+4+9	
~~Diagonal Tie Plates on Beams, No. of pairs~~				
~~Waterways materials and scantlings~~				
~~Flat of Middle Deck do.~~ do.				
~~How fastened to Beams~~				
Stringer Plates on ends of ~~Lower Deck~~, Hold ~~or~~ ~~Orlop~~ Beams	33	9	33	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle Irons on ditto, No. 2	4+4+9		4+4+9	
~~Stringer or Tie Plates, outside Hatchways~~				
~~Flat of Lower Deck~~				
Ceiling betwixt Decks, thickness and material	2½	Fir	2½	Fir
" in hold do. do.	2½	"	2½	"
Main piece of Rudder, diameter at head	6¼		6¼	
do. at heel	3¼		3¼	
Can the Rudder be unshipped afloat?	Yes			
Bulkheads No. 5 Thickness of		6		6
" Height up	Main Deck aft to cabin Deck Plated over			
" How secured to sides of ship	to Double frames			
" Size of Vertical Angle Irons	3+3+7/16 and distance apart 30 ins.			
" Are the outside Plates doubled two spaces of Frames in length?	Yes			

Transoms, material. Knight-heads. Hawse Timbers. Plates

Windlass Patent Emerson & Washington Pall Bitt

FRAMES extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 6" apart.

REVERSED ANGLE IRONS on floors and frames extend each to middle line to the upper part of keel, and to Beam Shelf 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 1/0 in. diameter, averaging 5½ 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 4 ins. from centre to centre.

" **Butts** of Three Strakes at Bilge for Half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect. one Strake Lapped

" **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 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 half length amidships. ~~Butts of Upper or Spar Sheerstrake, treble riveted length amidships.~~

" **Butts of Main Stringer Plate,** treble riveted for half length amidships. **~~Butts of Upper or Spar Stringer Plate,~~** ~~treble riveted for length.~~

" Breadth of laps of plating in double riveting 5¼ Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & Treble

Waterway, how secured to Beams (*Explain by Sketch, if necessary.*)

Beams of the various Decks, how secured to the sides? Ends turned & Knees Welded No. of Breasthooks, Seven Crutches, Three

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Yard

Manufacturer's name or trade mark, D L No Stockton on T. & Co.

The above is a correct description.

Builder's Signature, Thomas Turnbull & Son *Surveyor's Signature,* S. W. Gladstone

Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 494 - 0026

© 2019 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 fay close together throughout their length without requiring any making good of deficiencies? Yes

Are the fillings between the ribs and plates solid single pieces? Solid pieces

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? A few in butts

27305 Tons

Masts, Bowsprit, Yards, &c., are Iron & Wire 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~~ Main & Fore Mast made with three plates in the round Double riveted at edges Treble at butts. Plates 6/16 at wedging tapered away to 3/16 at head & heels Main Mast 66 ft 7 in Dia at heel 17½ Wedging 22½. round 16¾ head 14½ Fore Mast 70 ft 6 in Dia at heel 16½ Wedging 22½. round 17½ head 14½ One plate each wedging Doubled Iron tested & found good. Branded Steel.

NUMBER for EQUIPMENT 2055 4

	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Supmtdt.
N°.		Chain	270	1 11/16	51¼ tons	270 fath	51¼ tons
	Fore Sails,	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintdt.)	At South Dock		Sunderland	1¾	Feb 17. Hardy
	Fore Top Sails,	Iron Str'm Chain	75 f.	Hartnell 1 4/16	20 3/10 tons	75 fath	20 3/10 tons
		Ditto do.				6 1/16	
	Fore Topmast Stay Sails,	Hmpn Strm Cbl					
		Hawser	90	9		90 of 9½	
	Main Sails,	Towlines ...	90	11		90 of 11	
	Main Top Sails,	Warp	90	6½	—	90 of 7	
	and	quality Good	90	5½			
			60	6½			

ANCHORS.	N°.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Supmtdt.
Bower Anchors	3	20-2-7	27-11-3-14	27-3-0	26-10-0-0
(State Machine where Tested, Date, or No. of Certificate, & Name of Superintdt.)		20-0-14	27-4-1-14	27-3-0	26-10-0-0
		24-0-0	23-17-2-0	23-2-10	22-11-0-0
South Dock Sunderland Parks 25½ 1800 F. Hartnell					
Stream ...	1	8-3-7	11-0-0-0	0-3-0	10-17-0-0
Kedge ...	1	4-3-0	7-2-2-0	4-2-0	6-17-0-0
Ditto ...	1	2-1-7	4-17-2-0	2-1-0	4-15-0-0

Standing and Running Rigging Wire & Hemp sufficient in size and Good in quality. She has Four Long Boat and Good

The Windlass is Good Capstan Good and Rudder Good Pumps Four of 6 in Metal

Engine Room Skylights.—How constructed? 3 thick Teak How secured in ordinary weather? Bullseyes

What arrangements for deadlights in bad weather? Bullseyes

Coal Bunker Openings.—How constructed? Iron Coamings How are lids secured? Bars Height above deck? 15 inches

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Ports & Scuppers

Cargo Hatchways.—How formed? 7/16 Plate

State size **Main Hatch** 21 ft 10 × 12 ft. Coamings 3½ Forehatch 13 ft 9 × 11 ft. Coamings 3½ Quarterhatch 19 ft 9 × 12 ft. After Do. 18 × 12 ft. Coamings 24 in.

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? Two shifting web beams in Main & one in each of the after Lodgeways,

Hatches, If strong and efficient? 3 in Pine

Order for Special Survey No. 777

Date 6th Dec 1879

Order for Ordinary Survey No.

Date

No. 69 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

Special Survey Dates of Surveys 1879 & 80

Dec 24. Jany 12. Feb 3-14-27 March 4-16-31

April 12-22-26 May 5-11-27. June 12-21-25

July 3-16

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

Is fitted with Raised Quarter Deck Bridge & Forecastle, frames all thro' height. Beams of R.Q. Deck 8 × 5/16. Double angles thro' edges 3 × 3 × 6/16 & Stringer plates on ends 3 × 10/16 Angles on Do. 5 × 4 × 9/16. Plating outside 10-9 × 5/16. Deck 6/16 iron planked over with 3½ G. Pine Forecastle beams 6½ × 6/16 bulb. Double Angles thro' edges 3 × 3 × 6/16. Stringer plates on ends 2 5/8 × 7/16 Angles on Do. 3 × 3 × 6/16. Tie plates 10 × 6/16. Plating outside 6/16. Deck 3 in. G. Pine

Water Ballast Tanks fitted in fore & after hold frames cut & connection made with Knee plates. Side plates 7/16. Angles on Do. 3½ × 3½ × 7/16 Web plates 6/16, Angles thro' & bottom edges 3 × 3 × 6/16, thro' plating 6/16, tested by a head of water to the height of load line

Additional Strengthening at break of R.Q. Deck Main Deck Stringer plates extend 7 frame spaces abaft break R.Q. Do. 4 before, Hold beam Stringers overlap 16 ft. Sheer Straps Doubled for 20 ft.

35 ft 2 | 29 ft 6 in | Fore tank 91 ft. | After Do. 84 ft

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

How are the surfaces preserved from oxidation? Inside Flash Cemented Deck Portland Cement Outside & Other parts with Paint

I am of opinion this Vessel should be Classed 100 A1

Thomas Turnbull & Son

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

Special ... ...£ 66 : 8 : 0 24 July 1880

Certificate ... : :

(Travelling Expenses, if any, £ 5-0-0.)

S. W. Gladstone

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute Tuesday, July 27th 1880.

Character assigned 100 A1 This vessel appears to be eligible to be classed 100 A1 as recommended by Thos Turnbull & Son

Lloyd's Ste[illegible] 15th

Sir Surveyor's Attn 24th November 1879

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

© 2019 Lloyd's Register Foundation