

Steel
IRON SHIP.

(Received at London Office) THURSDAY 28 APRIL 1887

No. 6398 Survey held at West Hartlepool Date, First Survey 13 Oct. 86. Last Survey 22 Apr. 1887
On the Steel Screw Steamer "Manitoba" 2 Masts. Schooner Rig. (57 visits)

TONNAGE under 1618.14 ONE, OR TWO DECKED, THREE DECKED VESSEL, Master - H. W. H. H. H.
Tonnage Deck 1618.14 SPAR, OR AWNING DECKED VESSEL.
Ditto of Third, Spar, Bridge 259.02 Half Breadth (moulded) 18' 6"
or Awning Deck. 65.33 Depth from upper part of Keel to top of Upper Deck Beams 22' 5"
Ditto of Poop, or 116.82 Girth of Half Midship Frame (as per Rule) 36' 8"
Raised Qr. Dk. 3.00 1st Number 7747
Ditto of Houses on Deck 39.05 1st Number, if a 3-Decked Vessel deduct 7 feet
Ditto of Forecastle 25.47
as of Hatchways 2126.810
Gross Tonnage 59.85
Less Crew Space 2066.95
Less Engine Room 680.58
Register Tonnage 1386.37
as cut on Beam

LENGTH	Feet.	Inches.	BREADTH	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
on deck as per Rule	273	6	Moulded	37	0	top of Floors to Upper Deck Beams	19	4	Engines	200	One	One
Dimensions of Ship per Register, length,	275.0		breadth,	37.2		depth,	19.2					
KEEL, depth and thickness			Inches in Ship.			Inches per Rule.						
STEM, moulding and thickness			9 x 2 1/2			9 x 2 1/2						
STERN-POST for Rudder do. do.			9 x 5 1/2			9 x 5 1/2						
" " for Propeller			9 x 5 1/2			9 x 5 1/2						
Distance of Frames from moulding edge to moulding edge, all fore and aft			24			24						
FRAMES, Angle Iron, for 1 length amidships			5 3 9			5 3 9						
Do. for 1 at each end			5 3 8.7			5 3 8.7						
REVERSED FRAMES, Angle Iron at ends			3 1/2 3 8			3 1/2 3 8						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships			Cellular			See						
" thickness at the ends of vessel			bottom			Sections.						
" depth at 3/4 the half-bdth. as per Rule												
" height extended at the Bilges												
BEAMS, Upper, Spar, or Awning Deck			6 3 8			6 3 8						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron on Upper edge			24			24						
Average space												
BEAMS, Main, or Middle Deck												
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron												
Single, or double Angle Iron, on Upper Edge												
Average space												
BEAMS, Lower Deck - In After Hold			9 .. 9			9 .. 9						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron on Upper Edge			3 1/2 3 7			3 1/2 3 7						
Average space			4 feet			4 feet						
BEAMS, Hold, or Orlop												
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron												
Single or double Angle Iron on Upper Edge												
Average space												
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates			Cellular			See						
" Rider Plate			bottom			Sections.						
" Bulb Plate to Intercoastal Keelson												
" Angle Irons												
" Double Angle Iron Side Keelson												
" Side Intercoastal Plate												
" do. Angle Irons												
" Attached to outside plating with angle iron												
BILGE Angle Irons			Web frames			See						
" do. Bulb Iron			and			Sections.						
" do. Intercoastal plates riveted to plating for length			intercostals									
BILGE STRINGER Angle Irons			fitted									
Intercoastal plates riveted to plating for length												
SIDE STRINGER Angle Irons												

The FRAMES extend in one length from centre line to upper deck
The REVERSED ANGLE IRONS on floors and frames extend from middle line to gunwale in 1/2 length and to main & lower 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 1/8 in. diameter, averaging 5 1/8 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 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 all Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 3/20 thicker than the plates they connect.
Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets in. diameter, averaging 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 length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
Breadth of laps of plating in double riveting 6 5/4 1/2 Breadth of laps of plating in single riveting
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? No. of Breasthooks, 7. Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & bulbs from Hallside
Manufacturer's name or trade mark, Hoare & Carter Iron Co. Glasgow, and Plates from Longest Iron Co.

The above is a correct description.
Builder's Signature, E. W. H. H. H. Surveyor's Signature, J. H. Phillips
Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship.

Are the butts of plating planed or otherwise fitted?

Planed, where practicable

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, generally*

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? *Yes. A few in the butts only*

Masts, Bowsprit, Yards, &c., are *Iron* 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

The masts are of iron of the sizes & scantlings approved by the Committee in the Secretary's letter of the 23 Oct 86 to the Clerk Bridge St. Darlington. The iron used in these masts is from the West Hartlepool Iron Co. which has been tested as prescribed by the Rules & found satisfactory.

NUMBER & LETTER for SAILS.			EQUIPMENT		2357	Fathoms	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS. N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
N ^o .	CABLES, &C.		Chain	Stud	270	1 3/4	55 1/8 Tons	270-1 3/4	6436	11 Dec 86	Bower Anchors	1	30-0-16	28-16-1-0	30-0-0-0 15816.
One	Fore Sails,		Iron Stream Chain		75	1 1/6	20 3/10	75-1 1/6	6437	24 Nov 86	Stream Anchor	1	30-0-2	28-16-1-0	30-0-0-0 15815.
One	Fore Top Sails,		or Steel Wire		90	3 1/2	26 Tons	90-3 1/2			22/11/86	1	25-1-16	25-3-3-0	25-2-0-0 15817.
One	Fore Topmast Stay Sails,		or Hempen Strm		90	3	18	90-3					85-2-6	85-2-0	
One	Fore Topmast Stay Sails,		Towline, Hemp.		90	7 1/2		90-7 1/2					Smith's Patent Stockless Steel Anchors		
			or Steel Wire		2 1/2 80	6					4 1/2 86	1	9-2-21	11-15-2-14	9-2-0-0 15758.
Main Sails,			Hawser		2 1/2 80	5					3 1/2 86	1	4-3-7	7-5-0-0	4-3-0-0 15784.
Main Top Sails, and			Warp		1 1/2 80	5 1/2					2 1/2 86	1	2-2-0	5-0-0-0	2-2-0-0 15759.
			quality	and											

Standing and Running Rigging wire & manilla sufficient in size and good in quality. She has 2 Long Boats and 2 life boats.

The Windlass is *Iron* Capstan *Iron* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *of Iron* How secured in ordinary weather? *By slide bars.*

What arrangements for deadlights in bad weather? *Iron shutters with bulls' eyes.* bridge

Coal Bunker Openings.—How constructed? *of Iron* How are lids secured? *2 1/2 hatches* Height above deck? *15 ins.*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *On each side. In Forewell, two ports, and to R & D bulwarks, 3 Ports.*

Cargo Hatchways.—How formed? *of Iron. See Section*

State size Main Hatch *24-0 x 16-0* Fore hatch *12-0 x 16-0* Quarter hatch *22-0 x 16-0*

If of extraordinary size, state how framed and secured? *Web plates, shifting beams & fore & aft carlings, as*

What arrangement for shifting beams? *required by the Rules. See also approved tracing*

Hatches, If strong and efficient? *3 & 2 1/2. Yes*

Order for Special Survey No. *1189*

Date *22 Nov. 86*

Order for Ordinary Survey No.

Date

No. *142* 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

Built under Special Survey
Date 1st Survey *13 Oct. 86*
— Last — *22 Apr. 87.*
12 visits 57

State dates of letters respecting this case *14 Oct. 86. 13 Nov. 86.*

General Remarks (State quality of workmanship, &c.) *This vessel has been built in accordance with the Rules, & the tracings approved by the Committee. The whole of the steel used in the hull has been tested as prescribed by the Rules, and the requirements of the Committee in regard to annealing, rolling & countersinking complied with. The whole of the workmanship is of a good quality, and the vessel is coated internally with Day's Patent Cement.*

The Freeboards approved by the Committee in the Secretary's letter of the 21st April 1887 have been marked on the vessel's sides viz.
Winter Freeboard *2 ft 3*. Fresh Water Freeboard *4 1/2 inches* above Centre of Disc. Summer Freeboard *1 ft 11 1/2 inches.*

State if one, two, or three decked vessel, or if open, or running 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 *by Cement & paint* Outside *by paint.*

I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee£ *5* is received by me, *AP*

Special£ *76* 13: 6 29. 4. 18 87

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

(Travelling Expenses, if any, £)

Committee's Minute

Character assigned

FRIDAY 29 APRIL 1887

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

It is submitted that this vessel appears eligible to be classed *100 A 1* "Steel" as recommended.

Call D B Particulars appended

Lloyd's Register Foundation