

STEEL IRON SHIP.

(Received at London Office, 10. 4. 84)

No. *43676* Survey held at *London* Date, First Survey *July 5th 1883* Last Survey *April 8th 1884*

On the *Steel Iron S.S. "Quorra"*

TONNAGE under Tonnage Deck	<i>148.08</i>	ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.	Master <i>Williams</i>
Ditto of Third, Spar, or Awning Deck.		Half Breadth (moulded)	Built at <i>Britannia Yard</i>
Ditto of Poop, or Raised Qr. Dk.		Depth from upper part of Keel to top of Upper Deck Beams	When built <i>1883-4</i> Launched <i>31 Dec 1883</i>
Ditto of Houses	<i>25.54</i>	Girth of Half Midship Frame (as per Rule)	By whom built <i>Forrest & Son</i>
Decks on Deck	<i>2.29</i>	1st Number	Owners <i>Clement J. Morris</i>
Ditto of <i>Castles</i>	<i>2.29</i>	1st Number, if a 3-Decked Vessel .. deduct 7 feet	Residence <i>26 Brown Buildings</i>
Gross Tonnage	<i>175.91</i>	Length	Port belonging to <i>Liverpool</i>
Less Crew Space		2nd Number	Destined Voyage <i>Niger</i>
Less Engine Room	<i>56.29</i>	Proportions— Breadths to Length	If Surveyed while Building, Afloat, or in Dry Dock.
Register Tonnage as cut on Beam	<i>119.62</i>	Depths to Length—Upper Deck to Keel	<i>While Building & Fitting out</i>
		Main Deck ditto	

LENGTH on deck as per Rule ...	Feet. <i>124</i> Inches.	BREADTH Moulded ...	Feet. <i>20</i> Inches.	DEPTH top of Floors to Upper Deck Beams ...	Feet. <i>6</i> Inches. <i>11 1/2</i>	Power of Engines ...	N Horse. <i>54</i>	N ^o . of Decks with flat laid <i>one</i>	N ^o . of Tiers of Beams <i>one</i>
---------------------------------------	--------------------------	----------------------------	-------------------------	--	--------------------------------------	----------------------	--------------------	---	---

Dimensions of Ship per Register, length, *125* breadth, *20.2* depth, *7.0* DEPTH Moulded *7.6*

	Inches in Ship		Inches per Rule		Inches in Ship		Inches per Rule		
	In Ship	16ths In Ship	Inches per Rule	16ths per Rule	In Ship	16ths In Ship	Inches per Rule	16ths per Rule	
KEEL , depth and thickness	<i>30</i>	<i>13/32</i>	<i>30</i>	<i>13/32</i>	Flat Keel Plates, breadth and thickness	<i>30</i>	<i>13/32</i>	<i>30</i>	<i>13/32</i>
STEM , moulding and thickness	<i>6</i>	<i>1 1/4</i>	<i>6</i>	<i>1 1/4</i>	PLATES in Garboard Strakes, br'dth & thickness				
STERN-POST for Rudder do. do.	<i>6</i>	<i>2 1/4</i>	<i>6</i>	<i>2 1/4</i>	From Garboard to upper part of Bilges				
" " for Propeller					" Of d'bling at Bilge, or increased thickness, and length applied				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>20 inches</i>		<i>20 inches</i>		" From up. prt of Bilge to lr. edge of Sh'rstrake				
FRAMES , Angle Iron, for 2/3 length amidships	<i>2 1/2</i>	<i>2 1/2</i>	<i>4</i>	<i>2 1/2</i>	" Main Sheerstrake, breadth and thickness	<i>30</i>	<i>13/32</i>	<i>30</i>	<i>13/32</i>
Do. for 1/3 at each end					" Of d'bling at Sh'stk. & lng. applied 3/4 length	<i>20</i>	<i>8/32</i>	<i>30</i>	<i>8/32</i>
REVERSED FRAMES , Angle Iron	<i>2 1/4</i>	<i>2 1/4</i>	<i>7/32</i>	<i>2 1/4</i>	" From M'n. to Up. or Spar Dk. Sh'rstrake				
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	<i>10 1/2</i>		<i>7/32</i>	<i>10 1/2</i>	" Up. or Spar Dk Sh'rstrake, brdth & thicken'ss				
" thickness at the ends of vessel	<i>8</i>		<i>8/32</i>	<i>8</i>	Butt Straps to outside plating, breadth & thickness				
" depth at 3/4 the half-bdth. as per Rule	<i>8</i>		<i>5/4</i>	<i>8</i>	Lengths of Plating <i>6 spaces of frames upwards</i>				
" height extended at the Bilges	<i>21</i>		<i>21</i>		Shifts of Plating, and Stringers <i>2 spaces of frames</i>				
BEAMS , Upper, Spar or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>5 1/2</i>	<i>3</i>	<i>11/32</i>	<i>5 1/2</i>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<i>3 1/2</i>	<i>13/32</i>	<i>3 1/2</i>	<i>13/32</i>
Single or double Angle Iron on Upper edge					Angle Iron on ditto	<i>3 x 3</i>	<i>11/32</i>	<i>3 x 3</i>	<i>11/32</i>
Average space	<i>40</i>		<i>40</i>		Tie Plates fore and aft, outside Hatchways	<i>7</i>	<i>11/32</i>		
BEAMS , Main, or Middle Deck					Diagonal Tie Plates on Beams No. of Pairs				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron					Flat of Up., Spar, or Awning Dk. *	<i>3</i>		<i>3</i>	
Single, or double Angle Iron, on Upper Edge					How fastened to Beams <i>galvanized iron, but of same bolt</i>	<i>8</i>		<i>8</i>	
Average space					Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness				
BEAMS , Lower Deck—					Is the Stringer Plate attached to the outside plating?				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron					Angle Irons on ditto, No.				
Single or double Angle Iron on Upper Edge					Tie Plates, outside Hatchways				
Average space					Diagonal Tie Plates on Beams, No. of pairs				
BEAMS , Hold, or Orlop—					Flat of Middle Deck* do. do.				
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron					How fastened to Beams				
Single or double Angle Iron on Upper Edge					Stringer Plates on ends of Lower Deck, Hold or Orlop Beams				
Average space					Is the Stringer Plate attached to the outside plating?				
KEELSONS Centre line, single or double plate, or Intercoastal, Plates			<i>10/32</i>		Angle Irons on ditto, No.				
" Rider Plate			<i>10/32</i>		Stringer or Tie Plates, outside Hatchways				
" Bulb Plate to Intercoastal Keelson					Flat of Lower Deck *				
" Angle Irons <i>Steel</i>	<i>3</i>	<i>3</i>	<i>11/32</i>		Ceiling betwixt Decks, thickness and material	<i>Pine battens 4 space</i>			
" Double Angle Iron Side Keelson					" in hold do. do.	<i>2</i>		<i>2</i>	
" Side Intercoastal Plate			<i>8/32</i>		Main piece of Rudder, diameter at head	<i>3 1/2</i>		<i>3 1/2</i>	
" do. Angle Irons <i>Steel</i>	<i>3</i>	<i>3</i>	<i>11/32</i>		do. at heel	<i>2</i>		<i>2</i>	
" Attached to outside plating with angle Irons <i>Steel</i>					Can the Rudder be unshipped afloat? <i>Yes</i>				
BILGE Angle Irons <i>Steel</i>	<i>3</i>	<i>3</i>	<i>11/32</i>		Bulkheads No. <i>4</i> No. per Rule <i>14</i>			<i>7/32</i>	<i>7/32</i>
" do. Bulb Iron <i>Steel</i>	<i>5</i>		<i>8/32</i>		" Thickness of <i>1/32</i>				
" do. Intercoastal plates riveted to plating for length					" Height up <i>to main deck</i>				
BILGE STRINGER Angle Irons <i>Steel</i>	<i>3</i>	<i>3</i>	<i>11/32</i>		" How secured to sides of ship <i>with double frames</i>				
Intercoastal plates riveted to plating for half length	<i>5 1/2</i>		<i>11/32</i>		" Size of Vertical Angle Irons <i>2 1/4 x 2 1/4 x 7/8</i> and distance apart <i>30</i> ins.				
SIDE STRINGER Angle Irons					" Are the outside Plates doubled two spaces of Frames in length? <i>Yes</i>				

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

The **FRAMES** extend in one length from *Keel* to *Gunwale* Riveted through plates with *5/8* in. Rivets, about *5* apart.

The **REVERSED ANGLE IRONS** on floors and frames extend *across the middle line to upper part of bilge* and to *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 *3/4* in. diameter, averaging *3 1/4* ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *3/8* in. diameter, averaging *3 1/4* ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *3/4 x 5/8* in. diameter averaging *3 x 2 1/2* ins. from centre to centre.

" Butts of *one* Strakes at Bilge for length, *double* 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 *3/4 x 7/8* in. diameter, averaging *3 1/4 x 2 1/2* ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *3/4 x 5/8* in. diameter, averaging *3 x 2 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, *double* riveted for *entire* length amidships. Butts of Upper or Spar Sheerstrake, *treble* riveted length amidships.

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

" Breadth of laps of plating in double riveting *4 1/2 x 3 1/4* Breadth of laps of plating in single riveting *2 3/8*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *per rule* No. of Breasthooks, *Stringers connected at Crutches, the keel*

What description of *Steel* is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *From the Steel works at Blackside*

Manufacturer's name or trade mark, *Newton & Son Blackburn Steel Works, Glasgow, Services & Certified tests produced*

The above is a correct description.

Builder's Signature, *Forrest & Son* Surveyor's Signature, *J. N. Miles*

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

43676. Jan.

Workmanship. Are the butts of plating planed or otherwise fitted? *Chipped and filed when necessary*
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? *no*

Masts, Bowsprit, Yards, &c., are *all* 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 the Length and Diameter of Lower Masts and Bowsprit *are sufficient, and they are all made of wood.*

NUMBER for EQUIPMENT	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.		N ^o .	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested & Suprntd.
								Bower Anchors	Stream Anchor					
4256		Chain	120	3/4	15.2.2.0 10.2.2.0	3/4	Netherton No 13293 D. G. Lewis	2	4.3.10	7.5.0.0	4.1.0	Netherton No 1330 D. G. Lewis		
	Fore Sails,	Iron Stream Chain	90	9/16	3.15.0.0	9/16	Netherton No 13294 D. G. Lewis		4.3.7	7.5.0.0	4.1.0	Netherton No 1331 D. G. Lewis		
	Fore Top Sails,	or Steel Wire												
	Fore Topmast Stay Sails,	or Hempen Strm Cable	75	7		7								
	Main Sails,	Towline, Hemp or Steel Wire	75	8		6								
	Main Top Sails,	Hawser	46	6				Stream Anchor	1	1.1.12	3.15.3.21	1.1.0	Netherton No 1651 D. G. Lewis	
	and	Warp	90	4		4		Kedge	1	2.21		2.0		
		quality	40	3/4				2nd Kedge						

Standing and Running Rigging *Wire Ropes & Manilla* sufficient in size and *good* in quality. She has *one* Long Boat and *another*
The Windlass is *of Iron Good & Secure* Capstan *and Rudder* *good* Pumps *good*
Engine Room Skylights.—How constructed? *Wood framing on Iron Coaming* How secured in ordinary weather? *bolted*
What arrangements for deadlights in bad weather? *Solid wood sashes with bulls eyes*
Coal Bunker Openings.—How constructed? *Cast iron Deck plates* How are lids secured? *by turning to lock* Height above deck? *flush*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Ports in bulwarks hung with hinges and scuppers through Sheerstrakes level with the deck beam stringers*
Cargo Hatchways.—How formed? *Iron Coaming and hatches of solid wood*
State size Main Hatch *12.3 x 9.0* Forehatch *15.9 x 9.0* Quarterhatch
If of extraordinary size, state how framed and secured?
What arrangement for shifting beams? *web plate in Centre of fore hatch*
Hatches, if strong and efficient? *they are*

Order for Special Survey No. *7*
Date *1883*
Order for Ordinary Survey No. *2081*
No. *2081* in builder's yard.
State dates of letters respecting this case *Secretary's letter to Builders' 28/6/83 Copy herewith*
1st. On the several parts of the frame, when in place, and before the plating was wrought } *This vessel has been specially surveyed*
2nd. On the plating during the process of riveting } *while in process of construction and*
3rd. When the beams were in and fastened, } *fitting out, between the 5th of July 1883*
4th. When the ship was complete, and before the } *and the present date.*
5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) *The general quality of the Workmanship is good - Has been fitted with a very light awning shade deck above the forward & after main deck, which has been taken down and is intended to be replaced on the vessels arrival at her destination.*

State if one, two, or three decked vessel, or if spar, 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 *Cemented to upper part of bridge, paint* Outside *side of Iron & other paint*
I am of opinion this Vessel should be Classed *90 A 1 Steel*
The amount of the Entry Fee£ 1 : 2 : is received by me, *J. W. Miles*
Special£ 8 : 16 : *10/11/83*
(to be sent as per margin). Certificate ...
(Travelling Expenses, if any, £)
Committee's Minute *THURSDAY 13 APRIL 1884*
Character assigned *90 A 1 Steel*
J. W. Miles
Surveyor to Lloyd's Register of British and Foreign Shipping.
This vessel has been built in accordance with the appended approved plans and appears worthy to be classed as recommended
90 A 1 Steel
Lloyd's Register Foundation