

IRON SHIPS.

No. 37808 Survey held at London Date, First Survey 1st Dec 1870 Last Survey 21st Sept 1871
 On the Iron Steamer "Viceroy" Master J. H. Taylor
 Built at London
 When built 1871 Launched 21st July
 By whom built P. & H. Green
 Owners P. & H. Green
 Port belonging to London
 Destined Voyage India
 If Surveyed while Building, Afloat, or in Dry Dock.

ONE, OR TWO-DECKED, SPAR OR AWNING-DECKED VESSELS.	THREE DECKED VESSELS.
Half moulded breadth <u>18.8</u>	Half Moulded Breadth <u>18.8</u>
Depth from upper part of Keel to top of Upper Deck Beams <u>22.99</u>	Total Depth if three or more Decks <u>29.99</u>
Girth of Half Midship Frame (as per Rule) ... <u>36.33</u>	Total Girth of Half Midship Frame <u>43.33</u>
1st Number <u>78.12</u>	3rd Number <u>92.12</u>
Length <u>318</u>	Length <u>318</u>
2nd Number <u>2484216</u>	4th Number ... <u>2929416</u>
Depths to Length. <u>15.11</u>	Breadths to Length <u>8.4</u>

Net Tonnage 2477.03
 Gross Tonnage 2477.03
 Net Space, as per Rule 577.67
 Register Tonnage, as per Rule 577.67
 Net Space, as per Rule 577.67
 Register Tonnage, as per Rule 577.67

Length on deck as per Rule, <u>318</u>	Moulded Breadth, <u>18.8</u>	Depths from top of Floors to Upper and Main Deck Beams, as per Rule, <u>22.99</u>	Power of Engines, <u>240</u>	Nº. of Decks with flat laid, <u>2</u>	Nº. of Tiers of Beams, <u>2</u>
Dimensions of Ship per Register, length, <u>318</u> breadth, <u>18.8</u> depth, <u>22.99</u>					
Keel, if bar iron, depth and thickness <u>8 x 3</u>					
Do. if centre through plate, depth and thickness <u>10 x 2 1/2</u>					
Stern-post for Rudder do. do. <u>10 x 5 1/2</u>					
Stern-post for Propeller do. do. <u>10 x 5 1/2</u>					
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>24</u>					
Frames, size of Angle Iron, for 1/2 length amidships <u>5 x 3</u>					
Do. for 1/4 at each end <u>5 x 3</u>					
Reversed Frames, size of Angle Iron <u>3 1/2 x 3</u>					
Floors, depth and thickness of Floor Plate at mid line for half the length amidships <u>28 x 96</u>					
Do. at the ends <u>96</u>					
Do. do. do. at Bilge Keelson <u>10 1/2 x 96</u>					
Do. height extended at the Bilges <u>4 1/2 ft</u>					
Beams, Upper, Spar, or Awning-Deck (No. <u>1</u>) <u>7 1/2 x 76</u>					
Single or double Angle Iron, Plate or Tee Bulb Iron <u>3 1/2 x 96</u>					
Single or double Angle Iron on Upper edge <u>3 1/2 x 96</u>					
Average space <u>4 ft</u>					
Beams, Main or Middle Deck (No. <u>2</u>) <u>9 1/2 x 96</u>					
Single or double Angle Iron, Plate or Tee Bulb Iron <u>3 1/2 x 96</u>					
Single or double Angle Iron, on Upper Edge <u>3 1/2 x 96</u>					
Average space <u>4 ft</u>					
Frames, Lower Deck, Hold or Orlop (No. <u>10</u>) <u>10 x 96</u>					
Single or double Angle Iron, Plate or Tee Bulb Iron <u>4 x 96</u>					
Single or double Angle Iron on Upper Edges <u>4 x 96</u>					
Average space <u>20 ft</u>					
Keelson Centre line, single or double plate, box, or Intercoastal, size of Plates <u>25 x 96</u>					
Do. Plate to Intercoastal Keelson <u>6 x 4 x 96</u>					
Do. Size of Angle Irons <u>6 x 4 x 96</u>					
Do. Side Intercoastal Keelson, size of Plates <u>6 x 4 x 96</u>					
Do. Angle Irons on tops of Floors <u>6 x 4 x 96</u>					
Do. Bilge Keelson, <u>10 1/2 x 96</u>					
Do. do. Intercoastal plates riveted to plating for 1/2 length <u>6 x 4 x 96</u>					
Do. do. Angle Irons <u>6 x 4 x 96</u>					
Side Stringers (No. <u>1</u>) size of Angle Irons <u>6 x 4 x 96</u>					
Do. Intercoastal plates riveted to plating for 1/2 length <u>9 x 96</u>					
Transoms, material <u>or, if none, in what manner compensated for.</u>					
Knight-heads <u>Hawse Timbers</u>					
Windlass <u>on Harfield's</u> Pall Bitt <u>not any</u>					
The Frames extend in one length from <u>Keel</u> to <u>Gunwale</u>					
The Reverse Angle Irons on the floors and frames extend <u>from the middle line</u> to <u>Bilge and to the main and upper</u>					
Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u>					
Edges from Garboards to upper part of Bilge, worked <u>Clencher</u> , double or single Riveted; with Rivets (1/2 in.) diameter, averaging (4 ins.) from centre to centre.					
Butts from Keel to turn of Bilge, worked <u>carvel</u> with butt straps to strakes (1/2 in.) thick, double or single Riveted; with Rivets (1/2 in.) diameter averaging (4 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>only in the strakes</u>					
If 3 Strakes at Bilge for half length, treble riveted with Butt Straps <u>1/2</u> thicker than their plates.					
Edges from bilge to Main Sheerstrake, worked <u>carvel</u> with a lining piece () thick, or <u>clencher</u> , double or single riveted; with rivets (1/2 in.) diameter, averaging (4 ins.) from centre to centre.					
Edges of Sheerstrake, Main, double or single Riveted. Upper, double or single Riveted. At upper edge <u>single</u> At lower edge <u>double</u>					
Butts from Bilge to Main Sheerstrake, worked <u>Carvel</u> with Butt Straps (1/2 in.) thick, double or single Riveted; with Rivets (1/2 in.) diameter, averaging (4 ins.) from centre to centre.					
Butts of Main Sheerstrake, double or treble Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for half length amidships. Breadth of laps of plating in double Riveting (1/2 in.) Breadth of laps of plating in single Riveting (1/2 in.)					
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? <u>part treble and part double riveted</u>					
Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.)					
Beams of the various Decks, how secured to the sides? <u>by cross pieces and by Bolt Plate</u> No. of Breasthooks, <u>3</u> Crutches, <u>3</u>					
What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Cast Iron</u>					
Manufacturer's name or trade mark, <u>Hopkins & Co.</u>					

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature, P. & H. Green Surveyor's Signature, J. H. Taylor

9385 *Iron*
Workmanship. Are the butts of plating planed or otherwise fitted? *part planed the remainder hammer*
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*
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? *Solid*
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes* and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*
Are there any rivets which either break into or have been put through the seams or butts of the plating? *a few in the butts.*

Her Masts, Bowsprit, Yards, &c., are in *good* condition, and sufficient in size and length. If they are of Iron or Steel give the 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 *Fore Mast 135ft 2 1/2 in diam*
Main Mast 141 - - - 16 - - -
Mizen Mast 115 - - - 18 1/2 - - -
See Remarks attached

Lloyd's Cert Poplar
Brit Supr 26 Aug 1871
Route Docks Cardiff John M. Connors
"Public Test"

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Tons Test as per Certificate.	In. req'd per Rule.	Tons Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	157.	1 1/2	63 1/2	17 1/2	63 1/2	Bowers		20 2 1/2	33 1/2	24 0 0	31 1/2
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	91 1/2	1 1/2	18 -			(State Machine where Tested, and name of Superinten- dent).		35 1 1/2	32 1/2	24 0 0	27.
	Fore Topmast Stay Sails	Hempen Stream Cable	90 -	13		11	Each	Stream		13 2 1/2		13 2 0	
	Main Sails,	Hawser		11		11	90 tons			7 0 0		6 3 0	
	Main Top Sails,	Towlines		9 1/2		7 1/2		Kedges ...		3 2 0		3 1 0	
		Warp		7 1/2									
		All of good quality.											

Her Standing and Running Rigging *Pinion and Hom* sufficient in size and *good* in quality. She has *three* Long Boats and *three* others
The present state of the Windlass is *good* Capstan *good* and Rudder *good* Pumps *4th and 5th in each comp*

Engine Room Skylights. How constructed? *Strong and efficient* How secured in ordinary weather? *with hook-levers of iron*

What arrangements are there for deadlights in such for bad weather? *Teak dead lights fitted with Bull Eyes.*

Coal Bunker Openings. How constructed? *iron frame and plate* How are lids secured? *with lock* How high above deck? *flush.*

Scuppers, &c. What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? *See bulwark ports on each side exclusive of gangway ports.*

Cargo Hatchways. How formed? *iron frame and plate.* State size *13ft 10in x 10ft 10in 15ft 6in x 10ft 10in*
If of extraordinary size, state how framed and secured? *and 7ft 9in x 7ft 9in*

What arrangement for shifting beams? *the iron beam across Main Hatch 18 x 5 1/2 with double angle iron 3 x 3 x 7 1/2*

Hatches, themselves, whether strong and efficient? *Strong and efficient* **Main Hatchways.** State size *15ft x 10ft 10in.*

Order for Special Survey No. _____	DATES of	1st.	On the several parts of the frame, when in place, and before the plating was wrought	<i>Under</i>
Date _____	Surveys held	2nd.	On the plating during the progress of riveting	<i>Special</i>
Order for Ordinary Survey No. _____	while building	3rd.	When the beams were in and fastened, and before the decks were laid	<i>Survey</i>
Date _____	as per	4th.	When the ship was complete, and before the plating was finally coated or cemented	<i>While</i>
No. _____ in builder's yard.	Section 18.	5th.	After the ship was launched and equipped	<i>Building</i>

General Remarks. *This vessel is well built and is fitted with a full fore-castle 45ft x 8ft 6in the beams of which are of built plate 6 x 7 1/2 with double angle iron 2 1/2 x 2 1/2 x 5/8 on upper edge and attached to alternate frames.*

The water ballast tank in fore hold extends from fore most bulkhead to about 44ft abaft same the framing is of angle iron 3 x 3 x 7/8 and plating 9ft 6in thick. The latter secured home against the stiri-plating and is efficiently riveted thereto. Cross-plates to thin compensated for by the introduction of three main frames throughout the range of the ship each being 5 x 3 x 9/16 and averaging 5ft 6in length. Upper sheer strake on upper edge with plating 1 1/2 x 1 1/2 for 80ft amidships and tapering to 1 1/2 at 25ft on the fore side of same and for the same distance aft. as compensation for ports 17 x 14 cut through the side to afford light and ventilation to the cabin and the strake next down double with 1 1/2 plating (full depth) for 80ft amidships.

It will be seen that this vessel is 15 depths in length provision for which was made in the "Recommending Approval" Midship Section in strict accordance with which (as also with that of the Rules) she has been built excepting some slight alteration in fitting the middle line keels as desired by the Owners, and being fully equipped she is recommended that she be classed as named below.

State if one, two or three decked vessel, or if spar or running deck, and lengths of *pop.* fore-castle or raised quarter deck, or of double or *part double bottom*

In what manner are the surfaces preserved from oxidation? Inside *Paint and cement* Outside *Paint and Gallon*

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

The amount of the Entry Fee £ 5 : - : - is received by me,
Special £ 86 : 18 : 0
Certificate : : :
(Travelling Expenses)
(if any) £

Committee's Minute *21st September 1871*

Character assigned *100 A 1*

I concur in the opinion that this vessel should be classed as recommended 100 A 1 Three decked.
John M. Connors
26/9/71
Lloyd's Register Foundation