

IRON OR STEEL SHIP.

(Received at London Office, 11 MARCH 1890)

No. 23895 Survey held at Newcastle Date of writing Report 12 February 1890 Port of Newcastle
 Date, First Survey 16 July 1889 Last Survey 20 Feb 1890

On the Steamer "Hornby Grange" Rig Schooner

TONNAGE under Tonnage Deck 1881.91
 Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk. 400.42
 Total under Upper Dk. 2282.33

Do. of Poop 67.48
 Do. of Raised Qr. 118.08
 Do. of Bridge House
 Do. of Houses on Deck 5.56
 Do. of excess of Hatchways 6.33
 Do. of Forecastle

Gross Tonnage 2472.72
 Less Crew Space 78.74
2393.98

Less Engine Room Register Tonnage as cut on Beam 791.27
1592.87

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

Half Breadth (moulded) 20.00 Feet.

Depth from upper part of Keel to top of Upper Deck Beams 23.83

Girth of Half Midship Frame (as per Rule) 39.91

1st Number 83.74

1st Number, if a 3-Decked Vessel deduct 7 feet ✓

Length 298.34

2nd Number 24983

Proportions—Breadths to Length 7.46

Depths to Length—Upper Deck to Keel 12.51

Main Deck ditto ✓

Master J. J. Morrison

Year of appointment 1889

Built at Newcastle on Tyne

When built 1889 & 90 Launched Dec 1889

By whom built Wigham Richardson & Co.

Owners Houlder Bros & Co.

Managers ✓

Residence 146 Leadenhall St. London

Port belonging to London

Destined Voyage River Plate

If Surveyed while Building, Afloat, or in Dry Dock. One deck & part Awning

LENGTH on deck as per Rule 298 Feet. 4 Inches. **BREADTH** Moulded 40 Feet. 0 Inches. **DEPTH** top of Floors to Upper Deck Beams 20 Feet. 5 Inches. **Power of Engines** 400 Horse. **N° of Decks with flat laid** Two **N° of Tiers of Beams** Two

Dimensions of Ship per Register, length, 300.0 breadth, 40.3 depth, 19.9 Moulded depth 23.0

KEEL, depth and thickness 10 x 2 1/4 10 x 2 3/4

STEM, moulding and thickness 10 x 6 10 x 6

STERN-POST for Rudder do. do. 10 x 6 10 x 6

" " for Propeller 10 x 6 10 x 6

Distance of Frames from moulding edge to moulding edge, all fore and aft 24 in. 24 in.

FRAMES, Angle Iron, for 1/2 length amidships 5 x 3 1/2 x 3/4 10 x 3 1/2 x 3/4

Do. for 1/4 at each end 5 x 3 1/2 x 3/4 5 x 3 1/2 x 3/4

REVERSED FRAMES, Angle Iron at ends 3 1/2 x 3 1/2 x 3/4 3 1/2 x 3 1/2 x 3/4

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships Cellular double

" thickness at the ends of vessel Bottom all found aft

" depth at 1/2 the half-bdth. as per Rule As per Profile

" height extended at the Bilges As per Profile

BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 5 1/2 x 3 1/2 x 3/4 5 1/2 x 3 1/2 x 3/4

Single or double Angle Iron on Upper edge As per Profile

Average space On every frame

BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 7 1/2 x 3 1/2 x 3/4 7 1/2 x 3 1/2 x 3/4

Single or double Angle Iron on Upper Edge As per Profile

Average space On every frame

BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 10 1/2 x 10 10 1/2 x 10

Single or double Angle Iron on Upper Edge As per Profile

Average space As per Profile

KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates Cellular double

" Rider Plate bottom throughout

" Bulb Plate to Intercoastal Keelson with deep floors

" Angle Irons on every frame

" Double Angle Iron Side Keelson and as per beam

" Side Intercoastal Plate of midship section

" do. Angle Irons and Profile

" Attached to outside plating with angle iron web frames and

BILGE Angle Irons side intercoastal

" do. Bulb Iron plates as per beam

" do. Intercoastal plates riveted to plating for length length

BILGE STRINGER Angle Irons length

Intercoastal plates riveted to plating for length length

SIDE STRINGER Angle Irons length

The **FRAMES** extend in one length from Plating plates to gunwale

The **REVERSED ANGLE IRONS** on floors and frames extend near middle line to upper stringer and to upper beam

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 in. diameter, averaging 4 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 20 Strakes at Bilge for 3/4 length, treble riveted with Butt Straps 2 x 4 thicker than the plates they connect.

" Edges from Bilge to Main Sheerstrake, worked clench, double double 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 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

" Edges of Main Sheerstrake, double double riveted.

" Butts of Main Sheerstrake, treble riveted for 3/4 length amidships. Butts of upper or Spar Sheerstrake, treble riveted 1/2 length amidships.

" Butts of Main Stringer Plate, treble riveted for 3/4 length amidships. Butts of upper or Spar Stringer Plate, treble riveted for 1/2 length.

" Breadth of laps of plating in double riveting 3 1/2 Breadth of laps of plating in single riveting nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Through No. of Breasthooks, 5 Crutches, 3 & 2

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

Manufacturer's name or trade mark, Lough & Co. Plating, Corbridge Iron Co. Iron plating Moor iron works

The above is a correct description.

Builder's Signature, Wigham Richardson & Co. Surveyor's Signature, James Wilson

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

State clearly where plating is of alternate thicknesses as distinguished from elsewhere.

* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

State whether Ties are of

(Form No. 1 for Iron or Steel Ships—1000—2/4/89—Transfer Ink.)

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 p
to plate, &c., conform well to each other? *Yes very well*
Are the rivet holes well and sufficiently countersunk in the plate and pun
from the faying surfaces? *Yes*
Do any rivets break into or through the seams or butts of the plating? *a very few*

Masts, Bowsprit, Yards, &c., are *Iron* in *good* condition, and sufficient in size and length. If of Iron or Steel give scantlings in S
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 Material
State also Length and Diameter of Lower Masts and Bowsprit *Pole mast, Fore mast 80' 0" x 21 1/2" dia. Main mast 73' 6" x 21 1/2" dia. at deck; two plates in the lower 7/16" in thickness with double weather bands, and table riveted lugs Butts from deck to hounds & chokers of iron over iron works.*

Number for Equip- ment 28066 Letter for do. 6 N. SAILS. Fore Sails, Fore Top Sails, Fore Topmast Stay Sails, Main Sails, Main Top Sails, and quality	CABLES, &c.			Test per Certificate. Tons.	Fathoms & Inches per Rule.	Machine where Tested and Superintendent, also Name of Chain Maker.	ANCHORS. Number of Certificate (State if any and which Anchors are Stockless.)	Weight. Ex. Stock.	Test per Certificate (are Stockless.)	W'ght req'd per Rule.	Machine where Tested and Superintendent, also Name of Anchor Maker.
	Number of Certificate.	Fathoms.	Inches.								
	5918	225	1 1/4	88 1/2	270-1 1/2	marked U.T.L.W. certificates signed Robert Bunell	11433	35.5.0	32.8.3.0	34.0.0	marked B.P.H. & Co.
	5901	45	1 1/8	88 1/2	63 1/4	marked J.P. Abbott & Co.	11443	33.1.14	31.3.0.14	31.2.0	certificates signed Robert Bunell
		Iron Stream Chain or Steel Wire ..	75	1 1/8	36 1/4	marked J.P. Abbott & Co.	11569	29.1.0	28.1.1.0	29.0	Robert Bunell
		Hempen Str'm Cable	100	4	blue wire 100-4						
		TOWLINE— Hemp or Steel Wire	90	3 1/2	per rule						
		Hawser	90	3	per rule						
		Warp	90	7	per rule						
			90	5	per rule						
							Collector Weights	98.1.14		97.0.0	J.P. Abbott
							Stream	10.13.21	12.17.2.0	10.3.0	C. Lund
							Kedge	5.2.7	7.18.1.21	5.2.0	
							2nd Kedge...	2.2.14	5.2.2.0	2.2.0	

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *2* Long Boats and *2* others

The Windlass is *good* Capstan *✓* and Rudder *good* Pumps *metal & good*

Engine Room Skylights.—How constructed? *on iron trunk casing* How secured in ordinary weather? *with thumb screws*

What arrangements for deadlights in bad weather? *Solid teak shutters and thick circular glass*

Coal Bunker Openings.—How constructed? *Iron plate* How are lids secured? *Solid latches* Height above deck? *12 ins*

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

Cargo Hatchways.—How formed? *Iron plate coming at Headlog* Hatches, If strong and efficient? *3" Solid*

State size Main Hatch *29' 0" x 12' 0"* Forehatch *16' 0" x 12' 0"* Quarterhatch *20' 0" x 12' 0" & 16' 0" x 12' 0"*

If of extraordinary size, state how framed and secured What arrangement for shifting beams? *nil*

Order for Special Survey No. *2190* 1889. July 16. 19. 31 Aug. 8. 12. 23. 28. 30

Date *13 May 189* 2nd. On the plating during the process of riveting *Sept 2. 4. 9. 11. 16. 18. 27. Oct 11. 14. 16. 21. 24. Nov*

Order for Ordinary Survey No. *✓* 3rd. When the beams were in and fastened, and before the decks were laid... *6. 11. 15. 18. 22. 26. 29. Dec. 2. 5. 23. 27. 31. Jan. 6. 7. 10. 18. 21.*

Date *✓* 4th. When the ship was complete, and before the plating was finally coated or cemented.. *Feb 4. 5. 6. 7. 12. 13. 14. 20. 190*

No. *238* in builder's yard. 5th. After the ship was launched and equipped

State dates of letters respecting this case *2 May, 9 May, 25 July and the 5 Sept 1889* Total No. of Visits *45*

General Remarks (State quality of workmanship, &c.) *This Vessel has been built of Steel, & in accordance with the rules and tracings of Mid Ship Section, Profile, Deck plan &c. On the cellular bottom principle and with web frames in lieu of Hold Beams. Constructed with a short Poop about 26' 0" in length; Raised 2' deck about 76' in length and partial Awning deck about 198 ft in length. The double bottom &c have been tested to a head of water not less than required by the rules and proved very satisfactory, and the workmanship and materials throughout are of a good description.*

The freeboard as set forth in the Secretary's letter of the 9 May 189 has been marked on the sides of the vessel Winter 2' 3", Summer 1' 4" to top of main deck; 9' 2" to top of wood deck on upper wing deck and the freeboard to be recorded in the Register book

How are the surfaces preserved from oxidation? Inside *Portland cement & Paint* Outside *3 coats of paint*

Particulars for Record in R.B.—Length of Poop *26* ft., R.Q.D. *76* ft., Bridge Dk., *✓* ft., F'castle *✓* ft.; No. of Dks. (excluding spar, awn., &c.)

Material of dks. *Steel* *✓* spar, awn. dk., &c. *Iron* Material of spar, awn. dk., &c. *iron* *✓*; No. of tiers of beams (with and without dks. laid)

Official No. *✓*; Signal Letters *✓* If double bottom, state particulars on separate form.

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

The amount of the Entry Fee£ *5* : - : - is received by me *✓*

Special£ *84* : 18 : 6 *13/3/1890*

(to be sent as per margin). Certificate *Ratio* *✓*

(Travelling Expenses, if any, £ *✓*). *FRIDAY 14 MARCH 1890*

Committee's Minute

Character assigned *100 A1 Steel Pt awng dk*

+ Lmb 2/90 subject to freeboard of 9' 2 S

LA & CB 10k Stl pt to S web frames 9' 6 W

rpt awng dk iron 9' 10 1/2 W.N.A.

James Gibbon

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

It is submitted that this vessel appears eligible to be Classed 100 A1 (Steel) Pt. Awning Dk. as per comm.

The freeboard of 9' 2" 3/4 as approved by the Committee and how marked on the sides to be entered in the Classification Certificate and recorded in the Register Book and further the Winter 1889 freeboard of 9' 10 1/2 to be entered in the Classification Certificate.

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