

IRON SHIP.

No. *5969* Survey held at *Glasgow* Date, First Survey *January 8th 1883* Last Survey *5th January* 18*83*

On the *Steamer "Kirbyhall"*

TONNAGE under } *258.89* ONE, OR TWO DECKED, THREE DECKED VESSEL.
Tonnage Deck }
Ditto of Third, Spar, or Awning Deck. }
Ditto of Poop, or Raised Or. Dk. }
Ditto of Houses on Deck }
Ditto of Forecastle }
Gross Tonnage } *2691.14*
Less Crew Space } *70.60*
Less Engine Room } *861.16*
Register Tonnage } *1459.38*
as cut on Beam }

SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) *19.84* Feet.
Depth from upper part of Keel to top of Upper Deck Beams *28.18*
Girth of Half Midship Frame (as per Rule) *43.41*
1st Number *91.36*
1st Number, if a 3-Decked Vessel .. deduct 7 feet *4.00*
Length *328.20*
2nd Number *276.86*
Proportions— Breadths to Length... .. *8.25*
Depths to Length—Upper Deck to Keel... .. *11.68*
Main Deck ditto *15.94*

Master *G. Lenbury*
Built at *Glasgow*
When built *1882* Launched *11/11/82*
By whom built *London & Glasgow Ship B.C.*
Owners *Alexander & Ridd*
Residence *Liverpool*
Port belonging to *Liverpool*
Destined Voyage *Bombay*
If Surveyed while Building, Afloat, or in Dry Dock.
Built under special survey

LENGTH on deck as per Rule ... *328.2* Feet. *328.2* Moulded... *39.44* Feet. *39.44* DEPTH top of Floors to Upper Deck Beams ... *28.18* Feet. *28.18* Do. do. Main Deck Beams... *18.5* Feet. *18.5* Power of Engines ... *300* Horse. *300* N^o. of Decks with flat laid *200* N^o. of Tiers of Beams *200*

Dimensions of Ship per Register, length, *329.9* breadth, *40.0* depth, *25.9*

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>11 x 2 1/2</i>	<i>11 x 2 1/2</i>	PLATES in Garboard Strakes, br'dth & thickness	<i>36</i>	<i>12</i>
STEM, moulding and thickness... ..	<i>11 x 2 1/2</i>	<i>11 x 2 1/2</i>	From Garboard to upper part of Bilges...	<i>12 x 11</i>	<i>12 x 11</i>
STERN-POST for Rudder do. do.	<i>11 x 5 1/2</i>	<i>11 x 5 1/2</i>	Of d'bling at Bilge, or increased thickness, and length applied <i>230 feet</i>	<i>33 1/2</i>	<i>11</i>
" for Propeller	<i>11 x 5 1/2</i>	<i>11 x 5 1/2</i>	From up. prt of Bilge to l.r. edge of Sh'rstrake...	<i>12 x 11</i>	<i>12 x 11</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24</i>	<i>24</i>	Main Sheerstrake, breadth and thickness...	<i>41</i>	<i>13</i>
			Of d'bling at Sh'stk. & lng. applied <i>230 feet</i>	<i>35</i>	<i>11</i>
FRAMES, Angle Iron, for 2/3 length amidships ...	<i>5 3/4</i>	<i>5 3/4</i>	From M'n. to Up. or Spar Dk. Sh'rstrake...		
Do. for 1/3 at each end	<i>5 3/4</i>	<i>5 3/4</i>	Up. or Spar Dk. Sh'rstrake, br'dth & thickn's...	<i>Same to frame 13, frame to frame 13</i>	<i>Same to frame 13, frame to frame 13</i>
REVERSED FRAMES, Angle Iron	<i>3 1/2</i>	<i>3 1/2</i>	Butt Straps to outside plating, breadth & thickness	<i>12 x 11</i>	<i>12 x 11</i>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ...	<i>25</i>	<i>25</i>	Lengths of Plating	<i>2</i>	<i>2</i>
" thickness at the ends of vessel	<i>8</i>	<i>8</i>	Shifts of Plating, and Stringers	<i>2</i>	<i>2</i>
" depth at 3/4 the half-bdth. as per Rule ...	<i>12 1/2</i>	<i>12 1/2</i>	Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness...	<i>44</i>	<i>9</i>
" height extended at the Bilges... ..	<i>50</i>	<i>50</i>	Angle Iron on ditto	<i>4 x 4</i>	<i>9</i>
BEAMS, Upper, Spar, or Awning Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper edge } Average space... ..	<i>6</i>	<i>3</i>	Tie Plates fore and aft, outside Hatchways	<i>6</i>	<i>6</i>
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... ..	<i>3 1/2</i>	<i>3 1/2</i>	Diagonal Tie Plates on Beams No. of pairs	<i>4</i>	<i>4</i>
BEAMS, Lower Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } Single or double Angle Iron on Upper Edge } Average space... ..	<i>4 1/2</i>	<i>4 1/2</i>	Flat of Up., Spar, or Awning Dk. * How fastened to Beams <i>Plating</i>	<i>3 1/2</i>	<i>4.9</i>
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... ..	<i>4 1/2</i>	<i>4 1/2</i>	Stringer Plate on ends of Main or Middle Deck } Beams, breadth and thickness	<i>44</i>	<i>10</i>
KEELSONS Centre line, single or double plate, box, or Intercostal, Plates ...	<i>21</i>	<i>14</i>	Is the Stringer Plate attached to the outside plating?	<i>Yes</i>	<i>Yes</i>
" Rider Plate	<i>14</i>	<i>14</i>	Angle Irons on ditto, No. <i>2</i>	<i>4 x 4</i>	<i>9</i>
" Plate to Intercostal Keelson	<i>18</i>	<i>10</i>	Tie Plates, outside Hatchways	<i>4</i>	<i>4</i>
" Angle Irons	<i>6 1/2</i>	<i>4</i>	Diagonal Tie Plates on Beams, No. of pairs	<i>4</i>	<i>4</i>
" Double Angle Iron Side Keelson for 2/3 length	<i>9 1/2</i>	<i>9</i>	Flat of Middle Deck* do. do.	<i>20</i>	<i>20</i>
" Side Intercostal Plate	<i>6 1/2</i>	<i>4</i>	How fastened to Beams <i>Riveted</i>		
" do. Angle Irons	<i>6 1/2</i>	<i>4</i>	Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<i>42</i>	<i>9</i>
" Attached to outside plating with angle iron	<i>3 1/2</i>	<i>3 1/2</i>	Is the Stringer Plate attached to the outside plating?	<i>Yes</i>	<i>Yes</i>
BILGE Angle Irons	<i>6 1/2</i>	<i>4</i>	Angle Irons on ditto, No. <i>4 1/2</i> on outside edge	<i>4 x 4</i>	<i>9</i>
" do. Bulb Iron, for 2/3 length	<i>9 1/2</i>	<i>9</i>	Stringer or Tie Plates, outside Hatchways	<i>4 x 4</i>	<i>9</i>
" do. Intercostal plates riveted to plating for 3/5 length	<i>9</i>	<i>9</i>	Flat of Lower Deck * <i>Free plate</i>	<i>8 1/2</i>	<i>9</i>
BILGE STRINGER Angle Irons	<i>6 1/2</i>	<i>4</i>	Ceiling betwixt Decks, thickness and material ...	<i>8 x 2</i>	<i>8 x 2</i>
Intercostal plates riveted to plating for 3/5 length	<i>9</i>	<i>9</i>	" in hold do. do.	<i>2 1/2</i>	<i>2 1/2</i>
SIDE STRINGER Angle Irons	<i>6 1/2</i>	<i>4</i>	Main piece of Rudder, diameter at head	<i>8</i>	<i>8</i>
			do. at heel	<i>4</i>	<i>4</i>

The FRAMES extend in one length from *Middle line* to *Upper deck stringer* Riveted through plates with *7/8* in. Rivets, about *4*" apart.

The REVERSED ANGLE IRONS on floors and frames extend from *middle line* to *Upper deck stringer* and to *Middle deck stringer* 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 1/8* in. diameter, averaging *5 1/2* 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 *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 *Three* Strakes at Bilge for *half* length, treble riveted with Butt Straps *1/6*" thicker than the plates they connect.

" Edges from Bilge to Main Sheerstrake, worked clencher, 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 *7/8* in. diameter, averaging *3 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, 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 *half* length.

" Breadth of laps of plating in double riveting *5 1/2* ins. Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Double & single* No. of Breasthooks, *6* Crutches, *20196*

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

Manufacturer's name or trade mark, *Cats, Phoenix, Dorman Long & Co, Bolton, Vaughan & Co, Stone, & Winton Park.*

The above is a correct description.
Builder's Signature, *Wm. Henderson Glasgow Engineering* Surveyor's Signature, *J. J. Nicol*
Thames Iron Works & Shipbuilding Co. Ltd. Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship.

Are the butts of plating planed or otherwise fitted?

Planed

5969 gls

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?

a few

Masts, Bowsprit, Yards, &c., are

now

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

and Bowsprit

Foremast 28 feet
Main " 24 "

3 plates in the round, double riveted ends to lower mast head, single to topmast. Butts straps 1/2" thicker than plates and triple riveted.

NUMBER for EQUIPMENT 31983

SAILS.

CABLES, &c.

Fathoms.

Inches.

Test per Certificate.

Inches per Rule.

Machine where Tested & Suprntd.

ANCHORS.

No.

Weight.

Ex. Stock.

Test per Certificate.

Wght req'd per Rule.

Machine where Tested & Suprntd.

No.

Fore Sails,

300

15

13.5 9 1/2

300 x 15

Low Walker

Bower Anchors

329

36

3.2

33.5 0.0

36 1/2

Low Walker

Fore Top Sails,

90

17

13.5 3 1/2

90 x 17

R. Russell

Stream Anchor

7165

11.0

18

13.1.1.0

11 1/2

Low Walker

Fore Topmast Stay Sails,

100

12

100 x 12

Low Walker

Kedge

4169

5.3

8

8.2.3.4

5 1/2

Low Walker

Main Sails,

90

3 1/2

13.5 18 1/2

90 x 3 1/2

Low Walker

2nd Kedge

4170

2.2

15

5.5.0.0

2 3/4

Low Walker

Main Top Sails,

240

4

240 x 4

Low Walker

and

quality

good

120

3 1/2

120 x 3 1/2

Low Walker

Standing and Running Rigging

Wire and Manila

sufficient in size and

good

in quality.

She has

2-26 ft

Long

Boats

and

2 others

Low Walker

P. Russell

Low Walker

The Windlass is

Iron (Harfield's patent)

Capstan

do

and Rudder

good

Pumps

good

Low Walker

P. Russell

Low Walker

Low Walker

Engine Room Skylights.

How constructed?

Teak framing & shutters

How secured in ordinary weather?

rolled

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

What arrangements for deadlights in bad weather?

Gratings and tarpaulin

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Coal Bunker Openings.

How constructed?

Casting iron

How are lids secured?

Lockings

Height above deck?

Flush

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

Scuppers, &c.

What arrangements for clearing upper deck of water, in case of shipping a sea?

Fourteen scuppers,

Size open gangway ports, and six small water ports

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Cargo Hatchways.

How formed?

Deep coming plates forming comings and carlings

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

State size

Main Hatch

10.0 x 8.0

Fore hatch

16.0 x 13.0

Quarter hatch

12.0 x 10.0

No 4 hatch

6.0 x 8.0

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

If of extraordinary size, state how framed and secured?

Ordinary size

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

What arrangement for shifting beams?

One deep web plate in No. 2 hatch

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Hatches, If strong and efficient?

Yes

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Low Walker

P. Russell

Order for Special Survey No.

1649

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

1882 - Jan 18, 20, 25 & 30. Feb 1, 3, 4, 9, 13, 14, 21 & 28.

March 6, 10, 20, 24 & 30. April 4, 10, 13, 20, 24, 25 & 29.

May 4, 8, 15, 20, 29 & 30. June 1, 4, 15 & 23.

July 3, 5, 4, 10, 25 & 26. Aug 1, 2, 4, 7, 9, 14, 16, 21, 23, 30 & 31.

Sept 5, 11, 13, 15, 18, 25 & 28. Oct 5, 10, 13, 16, 14, 21, 23 & 25.

Nov 1, 2, 6, 9 & 30. Dec 4, 11, 13, 20 & 26. Jan 5/83

Low Walker

P. Russell

Low Walker

Order for Ordinary Survey No.

230

Date

in builder's yard.

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

The quality of workmanship and material is good.

This vessel has been built in conformity with the approved sections attached hereto, the instructions contained in the Secretary's letters dated 14th Oct and 26th Nov, 1881, 5th April, 19th July and 8th Sept 1882, and otherwise in compliance with the Rules with a view to the grade contemplated. (See below)

The sizes of hawsers and warps agree with those approved of on the date named; but the length of towline is in accordance with the Rules for the Vessel's number for equipment, the number given when this alteration was submitted required 120 fathoms and was based on the vessel having an enclosed bridge house which is now open.

A revised midship section is attached hereto, which embodies the scantlings approved by the Committee, but it will be seen that the iron middle deck is increased 1/2" in thickness to allow of built-iron beams to be fitted on alternate frames instead of built-angle iron beams on every frame.

Three decked vessel with

Poop 28 feet. Open Bridge 66 feet. Forecastle 38 feet.

Particulars of iron decks on separate form.

State if one, two, or three decked vessel, or if open, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside Paint and Cement Outside Paint

I am of opinion this Vessel should be Classed

100 A 1.

The amount of the Entry Fee ...

£ 5 : 0 : 0

is received by me,

Special ...

£ 90 : 10 : 0

Certificate ...

Gratis

(to be sent as per margin).

(Travelling Expenses, if any, £ ...)

Committee's Minute

Tuesday 26th January 1883.

Character assigned

Character assigned

100 A 1

2 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

Character assigned

100 A 1

2 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown

3 Mr. Brown