

STEEL IRON SHIP.

No. 9428 Survey held at *Port Glasgow* Date, First Survey *20th July 1887* Last Survey *3rd Decr. 1887*
 On the *Steel Screw Steamer "Kisanga"* (300 tons) *Lebanon Ry.*

TONNAGE under Tonnage Deck *1276.29* **CLASS** *TWO DECKED, THREE DECKED VESSEL.* **Master** *Thompson*
SPAR, OR AWNING DECKED VESSEL. **Built at** *Port Glasgow.*
Ditto of Third Spar, or 4th *90.86* **Depth** from upper part of Keel to top of Upper Deck Beams *20.5* **When built** *1887* **Launched** *5th Decr. 1887*
Ditto of Lower on Deck *34.93* **Girth of Half Midship Frame (as per Rule)** *33.54* **By whom built** *John Reid & Co.*
Ditto of Forecastle *40.88* **1st Number** *70.95* **Owners** *Hatton & Co. R. B.*
Gross Tonnage *1442.96* **1st Number, if a 3-Decked Vessel** *deduct 7 feet* **Residence** *3 Abbey Street.*
Net Tonnage *52.76* **Length** *263.5* **Port belonging to** *Liverpool*
Engine Room *1390.20* **2nd Number** *18695.* **Destined Voyage** *While building under J.P.*
Water Tonnage *461.75* **Proportions— Breadths to Length** *7.78* **If Surveyed while Building, Afloat, or in Dry Dock.**
Water out on Beam *928.45* **Depths to Length—Upper Deck to Keel** *12.88* *While building under J.P.*
Main Deck ditto *✓*

LENGTH *263.5* **BREADTH** *33* **DEPTH** *18.45* **Power of Engines** *200* **No. of Decks with flat laid** *2*
Rule *263.5* **Moulded** *33* **Do. do. Main Deck Beams** *18* **Inches** *8 1/2* **No. of Tiers of Beams** *2*
Dimensions of Ship per Register, length *265.8* **breadth** *34* **depth** *18.45* **Moulded depth** *19.7*
KEEL, depth and thickness *8 1/2 x 9 1/2* **FLAT KEEL PLATES, breadth and thickness** *36 15 36 15*
STEM, moulding and thickness *8 1/2 x 5* **PLATES in Garboard Strakes, br'dth & thickness** *11 11 11 11*
STERN-POST for Rudder do. do. *8 1/2 x 5* **" From Garboard to upper part of Bilges** *10 10 10 10*
" " for Propeller *8 1/2 x 5* **" Of d'bling at Bilge, or increased thickness, and length applied** *2 Strakes*
Distance of Frames from moulding edge to moulding edge, all fore and aft *24* **" From up. prt of Bilge to l. edge of Sh'rstrake** *10 10 10 10*
FRAMES, Angle Iron, for 1/2 length amidships *4 1/2 3 7 4 1/2 3 7* **" Main Sheerstrake, breadth and thickness** *40 14 40 14*
Do. for 1/2 at each end *4 1/2 3 6 4 1/2 3 6* **" Of d'bling at Sh'atk. & lng. applied** *11 11 11 11*
REVERSED FRAMES, Angle Iron *3 3 7 3 3 7* **" From M'n. to Up. or Spar Dk. Sh'rstrake** *11 11 11 11*
FLOORS, depth and thickness of Floor Plate *2 1/2 9 2 1/2 9* **" Up. or Spar Dk Sh'rstrake, br'dth & thckn'ss** *11 11 11 11*
at mid line for half length amidships *2 1/2 9 2 1/2 9* **Butt Straps to outside plating, breadth & thickness** *11 11 11 11*
thickness at the ends of vessel *11 11 11 11* **Lengths of Plating** *2.31 4 do 5.28 3 do*
depth at 1/2 the half-bdth. as per Rule *11 11 11 11* **Shifts of Plating, and Stringers** *2.31 4 do 5.28 3 do*
height extended at the Bilges *11 11 11 11* **Gunwale Plate on ends of** *38 10 38 10*
BEAMS, Upper, Spar, or Awning Deck *6 1/2 3 8 6 1/2 3 8* **Upper Deck Beams, breadth and thickness** *5x4x9 5x4x9*
Single or double Ang. Iron, Plate or Tee Bulb Iron *6 1/2 3 8 6 1/2 3 8* **Tie Plates fore and aft, outside Hatchways** *Steel 6x8 6x8*
Single or double Angle Iron on Upper edge *6 1/2 3 8 6 1/2 3 8* **Diagonal Tie Plates on Beams No. of Pairs** *Steel 6x8 6x8*
Average space *24 24 24 24* **Flat of Up., Spar, or Awning Dk.** *Steel 3 1/2 3 1/2*
BEAMS, Main, or Middle Deck *6 1/2 3 8 6 1/2 3 8* **How fastened to Beams** *3 1/2 3 1/2*
Single or double Ang. Iron, Plate or Tee Bulb Iron *6 1/2 3 8 6 1/2 3 8* **Stringer Plate on ends of Main or Middle Deck** *33 9 33 9*
Single or double Angle Iron, on Upper Edge *6 1/2 3 8 6 1/2 3 8* **Beams, breadth and thickness** *33 9 33 9*
Average space *24 24 24 24* **Is the Stringer Plate attached to the outside plating?** *Yes as reqd*
BEAMS, Lower Deck *6 1/2 3 8 6 1/2 3 8* **Angle Irons on ditto, No.** *2 2 2 2*
Single or double Ang. Iron, Plate or Tee Bulb Iron *6 1/2 3 8 6 1/2 3 8* **Tie Plates, outside Hatchways** *Steel 6x8 6x8*
Single or double Angle Iron on Upper Edge *6 1/2 3 8 6 1/2 3 8* **Diagonal Tie Plates on Beams, No. of pairs** *Steel 6x8 6x8*
Average space *24 24 24 24* **Flat of Middle Deck do.** *Steel 3 1/2 3 1/2*
BEAMS, Hold, or Orlop *6 1/2 3 8 6 1/2 3 8* **How fastened to Beams** *3 1/2 3 1/2*
Single or double Ang. Iron, Plate or Tee Bulb Iron *6 1/2 3 8 6 1/2 3 8* **Stringer Plates on ends of Lower Deck, Hold or Orlop Beams** *33 9 33 9*
Single or double Angle Iron on Upper Edge *6 1/2 3 8 6 1/2 3 8* **Is the Stringer Plate attached to the outside plating?** *Yes as reqd*
Average space *24 24 24 24* **Angle Irons on ditto, No.** *2 2 2 2*
KEELSONS Centre line, single or double plate *5 4 9 5 4 9* **Stringer or Tie Plates, outside Hatchways** *Steel 6x8 6x8*
Intercoastal, Plates *5 4 9 5 4 9* **Flat of Lower Deck** *Steel 3 1/2 3 1/2*
Rider Plate *5 4 9 5 4 9* **Ceiling betwixt Decks, thickness and material** *6x2 1/2 B.P.*
Bulb Plate to Intercoastal Keelson *5 4 9 5 4 9* **" in hold do. do.** *2 1/2 A. Elm 2 1/2*
Angle Irons *5 4 9 5 4 9* **Main piece of Rudder, diameter at head** *6 1/2 6 1/2*
Double Angle Iron Side Keelson *5 4 9 5 4 9* **Solid of least steel do. at heel** *3 1/2 3 1/2*
Side Intercoastal Plate *5 4 9 5 4 9* **Can the Rudder be unshipped afloat?** *Yes*
do. Angle Irons *5 4 9 5 4 9* **Bulkheads No. per Rule** *Four*
Attached to outside plating with angle iron *5 4 9 5 4 9* **" Thickness of** *6x5 6x5*
BILGE Angle Irons *5 4 9 5 4 9* **" Height up** *5 1/2 upper & 2 1/2 lower*
do. Bulb Iron *5 4 9 5 4 9* **" How secured to sides of ship** *Double frames*
do. Intercoastal plates riveted to plating for length *5 4 9 5 4 9* **" Size of Vertical Angle Iron** *4 1/2 x 3 1/2 and distance apart 30 ins.*
BILGE STRINGER Angle Irons *5 4 9 5 4 9* **" Are the outside Plates doubled two spaces of Frames in length?** *Yes*
Intercoastal plates riveted to plating for length *5 4 9 5 4 9*

SIDE STRINGER Angle Irons *5 4 9 5 4 9* **The FRAMES extend in one length from** *Keel to gunwale*
The REVERSED ANGLE IRONS on floors and frames extend *from middle line to upper & lower edge*
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 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 *2 1/2 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 length amidships. *Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.*
Butts of Main Stringer Plate, treble riveted for length amidships. *Butts of Upper or Spar Stringer Plate, treble riveted for half length.*
Breadth of laps of plating in double riveting *6 1/2 5/4 Breadth of laps of plating in single riveting*
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Double No. of Breasthooks, Three Crutches, Two.*
What description of iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Patent, Crossed, Clifton*
Manufacturer's name or trade mark, *Steel Co. of Scotland, W. Stockton, Coats, Phoenix & Waverley.*
The above is a correct description. *Mr. Reid & Co.* **Surveyor's Signature,** *Dawkins*
Builder's Signature, *Surveyor to Lloyd's Register of British and Foreign Shipping.*

Workmanship. Are the butts of plating planed or otherwise fitted?

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are *Steel* in *Good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain 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

In accordance with Rigging plan, and Spar plan, attached hereto.

Reference should be made to any correspondence connected with the case.

9
NUMBER for EQUIPMENT 20061

		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.								
SAILES.							Bower Anchors	1	27.3.26	27.2.2.0	27.3.0	25/11/86								
CABLES, &c.							(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	27.3.13	27.0.2.14	27.3.0	15/11/86								
Fore Sails,	Chain	270	1 1/2	71 3/4	270-1 1/2	24/11/87														
Fore Top Sails,	Iron Stream Chain	75	1 1/2		75-1 1/2	30/11/86														
Fore Topmast Stay Sails,	or Steel Wire	Both tested at Sunderland by J. Hartness						1	23.1.15	23.10.0.0	23.2.0	26/11/86								
	or Hempen Stem																			
	Cable																			
	Towline, Hemp	90	3 1/2	26 tons	90-11	28/11/87														
	or Steel Wire	Steel hawsers by W. & A. G. & Co. Sunderland						Stream Anchor	1	9.1.7	11.9.0.7	8.3.0	18/11/86							
	Hawser	90	3 1/2	18 tons	90-9	28/11/87														
	Warp	90	7		90-7			Kedge	1	4.2.0	6.17.2.0	4.2.0								
	quality	good Certificate supplied with Steel hawsers						2nd Kedge	1	2.2.0	5.0.0.0	2.1.0	3/2/86							
Standing and Running Rigging		pol. Iron wire sufficient in size and good in quality. She has 2 life Long Boats and 4 others																		
The Windlass is		Hampden & Co. Steam Capstan						and Rudder Cast-Steel Pumps as approved.												
Engine Room Skylights.		How constructed? Teak on iron casing						How secured in ordinary weather? Bolted												
What arrangements for deadlights in bad weather?		Thick glass bullseyes in solid teak																		
Coal Bunker Openings.		How constructed? Cast-iron shutters						How are lids secured? Bayonet fitting												
Scuppers, &c.		What arrangements for clearing upper deck of water, in case of shipping a sea?						5 Ports, 3 Pipes, 5 Scuppers, and 3 scuppers on each side.												
Cargo Hatchways.		How formed? 7/6 Cornings 18 above deck																		
State size Main Hatch		14-0 x 10-0		Forehatch		12-0 x 8-0	Quarterhatch		12-0 x 8-0											
If of extraordinary size, state how framed and secured?																				
What arrangement for shifting beams?		B.H. divides main. the after part 4 ft long forming Coaling hatch.																		
Hatches, If strong and efficient?		Yes, solid.																		

Date 26th July 1887

Order for Ordinary Survey No.

Date

No. 80 in builder's yard.

State dates of letters respecting this case

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

Quality of workmanship good
This vessel has been constructed in accordance with the approved sketches of midship and longitudinal sections and in all other respects with the Rules & the Committee's Circulars on Steel &c.

The fore peak ballast tank has been tested by pressure, the collision bulkhead by hose & work found good. The after peak is made watertight at lower deck this is not intended to be used as a ballast tank, but it has been tested by pressure & the upper part of bulkhead by means of a hose & work found good. The bridge deck extends to the sides of the vessel and is supported by the alternate frames being run up the sides of the bridge are open from the top of the bulwark to the face plate in way of beam ends.

Forecastle 30 ft. Bridge 70 ft. Poop 40 ft. and 4 ft. of mainmast with side houses. Middle line houses and casings under bridge for the whole length of bridge. Stem frame made of cast steel by Messrs. & Co. Sheffield tested by London Surveyors.

State if one, two, or three decked vessel, and if spar, or auxiliary decked; and the lengths of poop, bridge, forecastle, or mainmast. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside

I am of opinion this Vessel should be Classed

The amount of the Entry Fee

Special

(to be sent as per margin). Certificate

(Travelling Expenses, if any, £

Committee's Minute

Character assigned

TUESDAY 24 JAN 1888

18

100 A.1 Steel

2 decks Steel

+ d m c 1/88

ad & c p

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

It is submitted that this vessel

appears eligible for class

100 A.1 Steel as recommended

2 decks Steel

24/1/88

Lloyd's Register Foundation