

IRON SHIPS.

No. 3190 Survey held at Leith Date 7th September 18 64
 on the Ship James Wishart Master Buchanan
 Tonnage under tonnage deck 424 1/4 Built at Leith When built 1864 Launched 21st July 1864
 Ditto of poop 48 1/4 Deck ✓
 Ditto of engine room ✓ By whom built S. H. Morton & Co. Owners William Thomson & Co.
 Register 445.84 Port belonging to Leith Destined Voyage Australia
 Is Surveyed in Building, Afloat, or in Dry Dock While Building

Length	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	N ^o . of Decks
Length	42	9	30	65		20	0				Two
Dimensions of Ship per Register, length <u>42.9</u> breadth <u>30.65</u> depth <u>20.0</u>											
Keel, if bar iron, depth and thickness	Inches in Ship		Inches required per Rule		Plates in Garboard Strakes, breadth and thickness						
„ if plate iron, breadth and thickness	8 x 2 1/2		1 1/4 x 2 3/4		Ditto from Garboard to upper part of Bilges						
Stem, if bar iron, moulding and thickness	8 x 2 1/2		1 1/4 x 2 3/4		„ from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3 the entire depth of Hold						
„ if plate iron, breadth and thickness	8 x 2 1/2		1 1/4 x 2 3/4		„ from 2/3 the depth of Hold to lower edge of Sheerstrake						
Stern-post, if bar iron, moulding and thickness	8 x 2 1/2		1 1/4 x 2 3/4		„ Sheerstrake, breadth and thickness						
„ if plate iron, breadth and thickness	8 x 2 1/2		1 1/4 x 2 3/4		Butt Straps to outside plating, breadth and thickness						
Distance of Frames from moulding edge to moulding edge, all fore and aft	20		21		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness						
Frames, Size of Angle Iron, single or double	4 1/2 x 3		4 1/4 x 3		Angle Iron on ditto						
„ Reversed Iron if to every frame or every other frame	3 x 2 1/4		3 x 2 3/4		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways						
Floors, depth and thickness of Floor Plate at mid line	20		20 1/4		Diagonal Tie Plates on 5 pairs ditto						
„ Ditto ditto at Bilge Keelson	15		14 1/4		Planksheer, materials and scantlings						
„ Size of Reversed Angle Iron, and No. One, at top of Floor Plate	3 x 2 1/4		3 x 2 3/4		Waterway ditto ditto						
Beams, Deck (No. 40) double Angle Iron, Plate, Tee, or Bulb Iron	4 1/2 x 3		4 1/2 x 3		Flat of Upper Deck, thickness and material						
„ double or single Angle Iron, on upper edge	3 1/2 x 3		3 x 2 1/2		„ how fastened to Beams						
„ average space between	40 ins		40 ins		Ceiling betwixt Decks and in Hold, thickness and material						
„ Hold, or Lower Deck (No. 44) double Angle, Tee, Plate, or Bulb Iron	4 1/2 x 3		4 1/2 x 3		Clamps or Spiketting ditto						
„ double or single Angle Iron, on upper edge	3 1/2 x 3		3 x 2 1/2		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness						
„ average space between	40 ins		40 ins		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams						
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron					Stringers in Hold						
„ Engine					Flat of Lower Deck, thickness and material						
Keelson, single or double plate, box, or intercostal	13 1/2 x 10		13 1/2 x 9		Main piece of Rudder, diameter at head						
„ Size of Plates					„ at heel						
„ Size of Angle Irons	4 1/2 x 3		3 x 2 3/4		(Can the Rudder be unshipped afloat)						
„ Side, single or d'ble, plate, box, or intercostal	3 1/2 x 3		3 x 2 1/4		Bulkheads, No. 2 Thickness of						
„ Bilge (No. 50) at each Bilge, single, or double, plate, or box	4 1/2 x 4		4 1/4 x 3 1/4		„ Height up to Upper Deck						

Transoms, material Iron or, if none, in what manner compensated for.
 Knight-heads, and Hawse Timbers Iron & Wood
 The Frames extend in one length from Keel to Gunwale rivetted through plates with (7/8 in.) rivets, about (6 in.) apart.

The reverse angle irons on the floors extend in one length across the middle line from Gunwale to Gunwale
 „ „ „ on the frames „ „ „ from 6 ins above the Hold Beams on one side to same height on the other side

Keelson, how are the various lengths of plates or angle irons connected? Butt straps double rivetted

Plates, Garboard, double or single rivetted to keel, double or single rivetted at upper edge, with rivets (7/8 ins.) diameter, averaging (3 1/2 in.) apart.
 „ Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.
 „ Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/16) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? Yes
 „ Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? Yes
 „ Edges of Sheerstrake, double or single rivetted? At upper edge 4/8 rivets, 3 1/2 in apart At lower edge 4/8 rivets, 3 1/2 in apart
 „ Butts from bilge to planksheers, worked carvel with butt straps (10/16 x 1 1/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart. Breadth of laps in double rivetting (4 1/4 3/4) Breadth of laps in single rivetting ()

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?

Planksheer, how secured to the plating of the sides Explain by sketch See Section

Waterway „ „ planksheer and to the Beams if necessary.

Deck Beams, how secured to the side? Milded Iron plates rivetted to Frames

Hold or Lower Deck ditto Do

Paddle „ „ No. of breasthooks Five crutches Five

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

Manufacturer's name or trade mark Glasgow Iron Co.

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

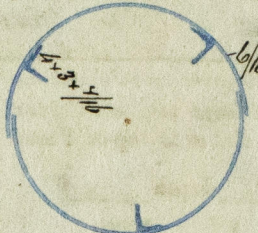
Builder's Signature S. H. Morton & Co. Surveyor's Signature Edmund Connelley

3740 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? *Yes*
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? *Yes* or are they in short lengths of various thicknesses?
Do the holes for rivetting 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 outer plate? *Yes*
Are there any rivets which either break into or have been put through the seams or butts of the plating? *No*

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 rivetting, quality of Materials, and if stamped with Maker's name.)

*Edges of Plates single rivetted
Below double rivetted above Deck
and treble rivetted below D^o.*



*Fore and Main Masts & Bowsprit Iron.
Fore and Main Lower Yards, and Fore
and Main Topmast Yards of Steel.
The remainder of American Red Pine.
ANCHORS, and their weights.*

She has SAILS.			CABLES, &c.			ANCHORS, and their weights.		
No.			Fathoms.	Inches.	Tested to Tons.	No.	Weight.	Tested to Tons.
2	Fore Sails,	Chain	<i>tested to 4 1/2 tons.</i>	300	1 7/16	4 1/2	Bowers, <i>Crotonans patent.</i>	1 } <i>28.2.0 25 70</i>
2	Fore Top Sails,	Hempen Stream Cable		90	8	✓		1 } <i>25.3.24 25 70</i>
2	Fore Topmast Stay Sails,	Hawser		90	1 1/2	10		1 } <i>24.0.20 25 70</i>
2	Main Sails,	Towlines		90	10	✓	Stream,	1 } <i>10.0.0 10 70</i>
2	Main Top Sails,	Warp		90	6 1/2	✓	Kedges,	1 } <i>4.3.31</i>
and others as usual for a double screw		All of	<i>good</i>	quality.				1 } <i>2.3.0</i>
Her Standing and Running Rigging			<i>Wire & Hempen</i> sufficient in size and			<i>good</i>	in quality. <i>✓ Cert. Vetrovino</i>	
She has			<i>One</i>	Long Boat and	<i>Two Life Boats and One Cig.</i>			<i>to the Survey</i>
The present state of the Windlass is			<i>efficient</i>	Capstan	<i>D. W.</i>	and Rudder	<i>and</i>	<i>Pumps efficient</i>
<i>16/5/64</i>								

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought *Specially*
No. *104* Surveys held 2nd. On the plating during the progress of rivetting *Surveyed while Building*
Date *24 April 1863* while building 3rd. When the beams were in and fastened, and before the decks were laid *as from*
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated *24 April 1863*
No. _____ Section 18. 5th. After the ship was launched *to 7th September 1864*
Date _____

State if she has a Spar Deck *None* Poop *full, 42 ft long* or Forecastle *32 feet long*

General Remarks,

The testing certificates of the Anchors and Chains are herewith attached as required by the Committee's letter of the 2nd August 1864.

In what manner are the surfaces preserved from oxidation? Inside *Painted to above turn of Bilge, above 3 coats of Red paint.*
Ditto ditto Outside *Three coats of paint & One of M. Jones patent paint in Bottom.*

I am of opinion this Vessel should be Classed *A*
The amount of the Fee £ *5: 0: 0* is received by me,
Special £ *38: 16: 0*
Certificate (if required) £ *43: 16: 0*

Committee's Minute *9th Sept. 1864*

Character assigned *A*

E. W. B. Conchman

The Hull of this Sailing Ship of Iron appears eligible for Classification as recommended and the Fig. added shows the Committee see fit, see no reason for omitting it.

Sept 20/64