

IRON 3741
IRON SHIPS.

No. 3190 Survey held at Leith Date 7th September 1864 Rev 8/9/64

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 18 1/4 or spar deck By whom built S. H. Morton & Co. Owners William Thomson & Co.

Ditto of engine room Port belonging to Leith Destined Voyage Australia

Register 445.84 Port belonging to Leith Destined Voyage Australia

Surveyed Building, Afloat, or in Dry Dock While Building

Length 142.9 Extreme Breadth 30.65 Depth from top of Upper Deck Beam to top of Floor 20.0 Power of Engines No. of Decks Two

Dimensions of Ship per Register, length 142.9 breadth 30.65 depth 20.0

	Inches in Ship	Inches required per Rule	Inches in Ship	Inches required per Rule	Inches in Ship	Inches required per Rule	Inches in Ship	Inches required per Rule
Keel, if bar iron, depth and thickness	8 x 2 1/2	7 1/4 x 2 3/4						
Keel, if plate iron, breadth and thickness	8 x 2 1/2	7 1/4 x 2 3/4						
Stem, if bar iron, moulding and thickness	8 x 2 1/2	7 1/4 x 2 3/4						
Stem, if plate iron, breadth and thickness	8 x 2 1/2	7 1/4 x 2 3/4						
Stern-post, if bar iron, moulding and thickness	8 x 2 1/2	7 1/4 x 2 3/4						
Stern-post, if plate iron, breadth and thickness	8 x 2 1/2	7 1/4 x 2 3/4						
Distance of Frames from moulding edge to moulding edge, all fore and aft	20	21						
Frames, Size of Angle Iron, single or double	4 1/2 x 3	4 1/4 x 3	8	8				
Reversed Iron if to every frame or every other frame	3	3	2 1/4	2 1/4	4	4		
Floors, depth and thickness of Floor Plate at mid line	20	20 1/4	10	9				
Ditto ditto at Bilge Keelson	15	14 1/4	10	9				
Size of Reversed Angle Iron, and No. One at top of Floor Plate	3	3	2 1/4	2 1/4	4	4		
Beams, Deck (No. 40) double Angle Iron, Plate, Tee, or Bulb Iron	4 1/2	4 1/2	3	3	6	6		
Double or single Angle Iron, on upper edge	3 1/2	3	3	3	6	5		
Average space between	40 ins	40 ins						
Hold, or Lower Deck (No. 44) double Angle, Tee, Plate, or Bulb Iron	4 1/2	4 1/2	3	3	6	6		
Double or single Angle Iron, on upper edge	3 1/2	3	3	3	6	5		
Average space between	40 ins	40 ins						
Paddle, sided and moulded, thickness of Plate size of Angle Iron								
Engine								
Keelson, single or double plate, box, or intercostal	13 1/2	13 1/2	10	9				
Size of Plates								
Size of Angle Irons	4 1/2	4 1/2	3	3	6	6		
Side, single or double, plate, box, or intercostal	3 1/2	3	3	3	6	6		
Bilge (No. Two) at each Bilge, single, or double, plate, or box	4 1/2	4 1/4	4	3 3/4	8	8		

	Inches in Ship	16ths in Ship	Inches required per Rule	16ths required per Rule
Plates in Garboard Strakes, breadth and thickness	33 1/2	12	30	12
Ditto from Garboard to upper part of Bilges		11		11
from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3rds the entire depth of Hold	24	10		10
from 2/3rds depth of Hold to lower edge of Sheerstrake	34	10		9
Sheerstrake, breadth and thickness	33	11	30	11
Butt Straps to outside plating, breadth and thickness	11 to 12			2, 11, 10, 9
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	3 1/2	8	2 1/2	9
Angle Iron on ditto	4 1/2 x 4	8	4 1/2 x 3 1/4	8
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	11	10	11	9
Diagonal Tie Plates on Spains ditto	11	10	11	9
Planksheer, materials and scantlings				
Waterway ditto ditto				
Flat of Upper Deck, thickness and material	1/2 Yellow Pine		3/2	
how fastened to Beams				
Ceiling betwixt Decks and in Hold, thickness and material	2 1/2 Red Pine			
Clamps or Spirketting ditto				
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	2 1/2	10	18	9
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	11	10	11	9
Stringers in Hold				
Flat of Lower Deck, thickness and material	3 Yellow Pine			
Main piece of Rudder, diameter at head	15			
" " " at heel	12 1/2			
(Can the Rudder be unshipped afloat)	Yes			
Bulkheads, No. 2 Thickness of	6 1/2		6 1/2	
Height up to Upper Deck				
how secured to the sides of the ship	Single beam, extended Butt straps and long plates			
size of vertical angle irons	3 x 2 1/2			
and their distance apart	3 ins			

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 (3/8 in.) rivets, about (6 ins) 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 rivetted at upper edge, with rivets (7/8 ins.) diameter, averaging (3 1/2 ins.) 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 ins.) 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 ins.) 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 ins.) 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 ins apart At lower edge 4/8 rivets, 3 1/2 ins apart

Butts from bilge to planksheers, worked carvel with butt straps (10/16 or 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 See Section

Waterway " " planksheer and to the Beams if necessary.

Deck Beams, how secured to the side? Milded Tee 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 Conner

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? or are they in short lengths of various thicknesses? Yes

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
Plates double rivetted above Deck
and triple rivetted below D.



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. Tons.
<u>2</u>	Fore Sails,	Chain <u>tested to 44 tons.</u>	<u>300</u>	<u>1 7/16</u>	<u>44</u>	<u>28.2.0</u>
<u>2</u>	Fore Top Sails,	Hempen Stream Cable	<u>90</u>	<u>8</u>	<u>✓</u>	<u>25.3.24</u>
<u>2</u>	Fore Topmast Stay Sails,	Hawser	<u>90</u>	<u>1 1/2</u>	<u>10</u>	<u>24.0.20</u>
<u>2</u>	Main Sails,	Towlines	<u>90</u>	<u>10</u>	<u>✓</u>	<u>10.0.0</u>
<u>2</u>	Main Top Sails,	Warp	<u>90</u>	<u>6 1/2</u>	<u>✓</u>	<u>10.0.0</u>
and <u>others as usual for a double screw</u>		All of <u>good</u> quality.				<u>1 4.3.21</u>
Her Standing and Running Rigging		<u>Wire & Hempen</u> sufficient in size and <u>good</u> in quality. <u>✓</u>				
She has <u>One</u> Long Boat and <u>Two Life Boats and One Gig</u>						
The present state of the Windlass is <u>efficient</u>		<u>Capstan D. W.</u>	<u>and Rudder</u>	<u>and Pumps</u>	<u>efficient</u>	<u>16/9/64</u>

Order for Special Survey DATES of

No. 104 Surveys held

Date 24 April 1863 while building

Order for Ordinary Survey as per

No. _____ Section 18.

Date _____

1st. On the several parts of the frame, when in place, and before the plating was wrought Specially

2nd. On the plating during the progress of rivetting Surveyed while Building

3rd. When the beams were in and fastened, and before the decks were laid as from

4th. When the ship was complete, and before the plating was finally coated 24 April 1863

5th. After the ship was launched to 7th September 1864

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 W. 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) £ _____

Committee's Minute 243: 16: 0 18 64

Character assigned A

E. W. Jones

The Hull of this Sailing Ship of Iron appears eligible for Classification as recommended and the right advice should be the Committee see file, I see no reason for omitting it.

16/9/64