

STEEL IRON SHIP.

(Received at London Office, 1 SEP. 88)

No. 3471 Survey held at *Belfast* Date, First Survey, *14th January* Last Survey *1st August 1888*

On the *Spar deck* *Steel Screw Steamer "Fort William"*

TONNAGE under *1772.03* ONE OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR ~~ENGINE~~ DECKED VESSEL.

Master

Built at *Belfast*

When built *1888* Launched

By whom built *Workman, Clark & Co.*

Owners *Clark and Service*

Residence *Glasgow.*

Port belonging to *Glasgow.*

Destined Voyage

If Surveyed while Building, Afloat, or in Dry Dock.

Specially during Construction

Ditto of *Upper Deck* *17.89*
Ditto of *Lower Deck* *1.69*
Ditto of *Houses* *13.39*
Ditto of *Forecastle* *6.13*
Gross Tonnage *1807.13*
Less Crew Space *80.29*
Less Engine Room *578.25*
Register Tonnage *1178.56*

Half Breadth (moulded) *18.5*
Depth from upper part of Keel to top of Upper Deck Beams *19.92*
Girth of Half Midship Frame (as per Rule) *34.75*
1st Number *793.17*
1st Number, if a 3-Decked Vessel deduct 7 feet *86.17*
Length *269.5*
2nd Number *19719.5*
Proportions—Breadths to Length *4.2*
Depths to Length—Upper Deck to Keel *9.8*
Main Deck ditto *13.85*

LENGTH on deck as per Rule *269 6* BREADTH Moulded *37 0* DEPTH top of Deck Beams to Upper Deck Beams *23 6 3/4* Power of Engines *136* No. of Decks with flat laid *Two* No. of Tiers of Beams *Two*

Dimensions of Ship per Register, length *271.2* breadth *37.15* depth *21.4* Moulded to Spar *26.3 1/2* to Main *18.9 1/2*

	Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.		Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>10 x 3/4</i>	<i>9 1/2 x 2 1/2</i>	FLAT KEEL PLATES, breadth and thickness	<i>46</i>	<i>12 1/2</i>	<i>36</i>	<i>12 1/2</i>	<i>108 1/2</i>						
STEM, moulding and thickness	<i>10 x 2 1/4</i>	<i>9 x 2 1/2</i>	PLATES in Garboard Strakes, br'dth & thickness	<i>46</i>	<i>12 1/2</i>	<i>36</i>	<i>12 1/2</i>	<i>108 1/2</i>						
STERN-POST for Rudder do. do.	<i>9 x 5 1/2</i>	<i>9 x 5 1/2</i>	From Garboard to upper part of Bilges	<i>10 1/2</i>	<i>10 1/2</i>	<i>108 1/2</i>								
" for Propeller	<i>9 x 5 1/2</i>	<i>9 x 5 1/2</i>	Of d'bling at Bilge, or increased thickness, and length applied	<i>10 1/2</i>	<i>10 1/2</i>	<i>108 1/2</i>								
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24</i>	<i>24</i>	From up. prt of Bilge to l. edge of Sh'rstrake	<i>40</i>	<i>13 1/2</i>	<i>40</i>	<i>13 1/2</i>	<i>108 1/2</i>						
FRAMES, Angle <i>5 3 8</i> , for $\frac{2}{3}$ length amidships	<i>5 3 8</i>	<i>5 3 8</i>	Main Sheerstrake, breadth and thickness	<i>40</i>	<i>13 1/2</i>	<i>40</i>	<i>13 1/2</i>	<i>108 1/2</i>						
Do. for $\frac{1}{3}$ at each end	<i>5 3 7</i>	<i>5 3 7</i>	Of d'bling at Sh'stk. & lng. applied	<i>40</i>	<i>13 1/2</i>	<i>40</i>	<i>13 1/2</i>	<i>108 1/2</i>						
REVERSED FRAMES, Angle <i>5 3 8 1/2</i>	<i>5 3 8 1/2</i>	<i>5 3 8 1/2</i>	From M'n. to Upper or Spar Dk. Sh'rstrake	<i>40</i>	<i>13 1/2</i>	<i>40</i>	<i>13 1/2</i>	<i>108 1/2</i>						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>3 1/2 x 1/4</i>	<i>6</i>	Upper Spar Dk Sh'rstrake, br'dth & thickn'ss	<i>40</i>	<i>13 1/2</i>	<i>40</i>	<i>13 1/2</i>	<i>108 1/2</i>						
" thickness at the ends of vessel	<i>3 1/2 x 1/4</i>	<i>6</i>	Butt Straps to outside plating, breadth & thickness	<i>19 1/2</i>	<i>11 1/2</i>	<i>19 1/2</i>	<i>11 1/2</i>	<i>15 1/2</i>						
" depth at $\frac{2}{3}$ the half-bdth. as per Rule	<i>3 1/2</i>	<i>6</i>	Lengths of Plating	<i>10</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>						
" height extended at the Bilges	<i>3 1/2</i>	<i>6</i>	Shifts of Plating, and Stringers	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>						
BEAMS, Upper, Spar, or Engine Deck	<i>4</i>	<i>4</i>	Gunwale Plate on ends of Upper Spar, or Engine Deck Beams, breadth and thickness	<i>48</i>	<i>8 1/2</i>	<i>48</i>	<i>8 1/2</i>	<i>8 1/2</i>						
Single Angle Iron , Plate or Tee Bulb Iron	<i>3 3 6</i>	<i>3 3 6</i>	Angles on ditto	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Single or double Angles on Upper edge	<i>3 3 6</i>	<i>3 3 6</i>	Tie Plates fore and aft, outside Hatchways	<i>13</i>	<i>8 1/2</i>	<i>13</i>	<i>8 1/2</i>	<i>8 1/2</i>						
Average space	<i>48</i>	<i>48</i>	Diagonal Tie Plates on Beams No. of Pairs	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>						
BEAMS, Main, or Upper Deck	<i>6 1/2 3 9</i>	<i>6 1/2 3 9</i>	Flat of Up., Spar, or Awning Dk.	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>						
Single Angle Iron , Plate or Tee Bulb Iron	<i>6 1/2 3 9</i>	<i>6 1/2 3 9</i>	How fastened to Beams	<i>39</i>	<i>10 1/2</i>	<i>38 1/2</i>	<i>10 1/2</i>	<i>10 1/2</i>						
Single, or double Angle Iron, on Upper Edge	<i>6 1/2 3 9</i>	<i>6 1/2 3 9</i>	Stringer Plate on ends of Main Upper Deck Beams, breadth and thickness	<i>37</i>	<i>8</i>	<i>37</i>	<i>8</i>	<i>8</i>						
Average space	<i>24</i>	<i>24</i>	Is the Stringer Plate attached to the outside plating?	<i>Yes</i>										
BEAMS, Lower Deck	<i>4</i>	<i>4</i>	Angles on ditto, No. <i>2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>4</i>	<i>4</i>	Tie Plates, outside Hatchways	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Single or double Angle Iron on Upper Edge	<i>4</i>	<i>4</i>	Diagonal Tie Plates on Beams, No. of pairs	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Average space	<i>24</i>	<i>24</i>	Flat of Middle Deck* do. do.	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
BEAMS, Hold, or Orlop	<i>4</i>	<i>4</i>	How fastened to Beams	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	<i>4</i>	<i>4</i>	Stringer Plates on ends of Lower Deck, Hold	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Single or double Angle Iron on Upper Edge	<i>4</i>	<i>4</i>	Is the Stringer Plate attached to the outside plating?	<i>Yes</i>										
Average space	<i>24</i>	<i>24</i>	Angles on ditto, No. <i>3</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
KEELSONS Centre line, single Angle Iron , Plates	<i>42 1/2</i>	<i>9 1/2</i>	Stringer or Tie Plates, outside Hatchways	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Rider Plate	<i>48</i>	<i>8 1/2</i>	Flat of Lower Deck*	<i>4 1/4</i>	<i>9 1/2</i>	<i>4 1/4</i>	<i>9 1/2</i>	<i>9 1/2</i>						
Angles <i>4 1/4</i>	<i>4 1/4</i>	<i>9 1/2</i>	Ceiling betwixt Decks, thickness and material	<i>6 x 2</i>	<i>W.P.</i>	<i>2</i>								
Double Angle Iron Side Keelson	<i>4 1/4</i>	<i>9 1/2</i>	" in hold do. do.	<i>9 x 2 1/2</i>	<i>R.P.</i>	<i>2 1/2</i>								
Side Angles <i>Longitudinals</i>	<i>3 3 7</i>	<i>3 3 7</i>	Main piece of Rudder, diameter at head	<i>7</i>	<i>five pins in</i>	<i>4</i>								
do. Angles <i>to do.</i>	<i>3 3 7</i>	<i>3 3 7</i>	do. at heel	<i>3 1/2</i>	<i>rudder</i>	<i>3 1/2</i>								
Attached to outside plating with angles	<i>3 3 7</i>	<i>3 3 7</i>	Can the Rudder be unshipped afloat?	<i>Yes</i>										
Angles <i>to flange plate</i>	<i>3 3 8</i>	<i>3 3 8</i>	Bulkheads No. <i>Four</i> No. per Rule <i>Four</i>											
do. Bulb Iron	<i>3 3 8</i>	<i>3 3 8</i>	" Thickness of <i>20 60</i>											
Flange plates riveted to plating for <i>whole length</i>	<i>30</i>	<i>7 24 7</i>	" Height up <i>to Spar deck</i>											
BILGE STRINGER Angle <i>5 1/2 4 9 1/2</i>	<i>5 1/2 4 9 1/2</i>	<i>5 1/2 4 9 1/2</i>	" How secured to sides of ship <i>between double frames</i>											
Intercoastal plates riveted to plating for <i>2 length</i>	<i>5 1/2 4 9 1/2</i>	<i>5 1/2 4 9 1/2</i>	" Size of Vertical Angles <i>5 x 3 x 8</i> and distance apart <i>30 ins.</i>											
SIDE STRINGER Angle Irons	<i>5 1/2 4 9 1/2</i>	<i>5 1/2 4 9 1/2</i>	" Are the outside Plates doubled two spaces of Frames in length? <i>Yes</i>											

The FRAMES extend in one length from *flange plate to ft. pt. thence to upper deck* riveted through plates with $\frac{7}{8}$ in. Rivets, about *6 1/2* apart.
The REVERSED ANGLES on floors and frames extend *from middle line to 11 1/2 ft. thence to main and to Spar* alternately
KEELSONS. Are the various lengths of Plates and Angles properly connected? *Yes* And butts properly shifted? *Yes*

PLATING. Garboard, double riveted to Keel, with rivets $\frac{1}{8}$ in. diameter, averaging *5 1/4* ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets $\frac{7}{8}$ in. diameter, averaging *3 1/2* ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets $\frac{7}{8}$ in. diameter averaging *3 1/2* ins. from centre to centre.
Butts of *four* Strakes at Bilge for *2* length, treble riveted with Butt Straps *2 1/2* thicker than the plates they connect.
Edges from Bilge to Main Sheerstrake, worked clencher, double ~~single~~ riveted; with rivets $\frac{7}{8}$ in. diameter, averaging *3 1/2* ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, ~~single~~ riveted; with rivets $\frac{7}{8}$ in. diameter, averaging *3 1/2* ins. from cr. to cr.
Edges of Main Sheerstrake, double ~~single~~ riveted. Upper Sheerstrake, double ~~single~~ riveted.
Butts of Main Sheerstrake, treble riveted for *2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *2* length amidships.
Butts of Main Stringer Plate, treble riveted for *2* length amidships. Butts of ~~Upper~~ Spar Stringer Plate, treble riveted for *2* length.
Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Treble & double* No. of Breasthooks, *4 1/2* dup floors, *3 1/2* dup floors
What description of ~~iron~~ is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Siemens Martin Steel*
Manufacturer's name or trade mark, *James & Co. Ltd. Keelson, girders and part beams & stringer plates from Glasgow & S.S. Co. Keelson plates, decks & stringer plates from London S.S. Co. Shell & part floors from Glasgow S.S. Co. Ballast tanks & b-heads from West Clyde & Co. S.S. Co.*
The above is a correct description.
Surveyor's Signature, *James Maxton* Surveyor to Lloyd's Register of British and Foreign Shipping.

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?

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 of steel plates 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

Vessel is Schooner rigged as auxiliary to Steamer with fore mast square rigged on fore mast. Fore mast heel to hounds 76'-4" to partners 25'-4" dia. a heel 16" partners 21" hounds 17" two plates in round $\frac{3}{32}$ " heel $\frac{13\frac{1}{2}}{32}$ " partners $\frac{11}{32}$ " at hounds. Main mast 69'-8" long dia. heel 16" - $\frac{1}{2}$ " 21" hounds 16 $\frac{1}{2}$ " plates $\frac{3}{32}$ " - $\frac{12\frac{1}{2}}{32}$ " + $\frac{3}{32}$ " respectively, two plates in round, butts treble riveted and landings double riveted all of steel. Yards wood (P.P.). Three angle irons 3" x 3" x $\frac{3}{16}$ " are fitted in foremast.

NUMBER & LETTER for EQUIPMENT	SALES.	CABLES, &c.	Fathoms	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS: N ^o .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
Fore Sails,	Chain	Iron Stream Chain						Bower Anchors				
Fore Top Sails,	or Steel Wire	or Hempen Strm						Stream Anchor				
Fore Topmast Stay Sails,	Cable	Towline, Hemp						Kedge				
Main Sails,	Hawser	Warp						2nd Kedge				
Main Top Sails, and quality												

Standing and Running Rigging Steel wire & hemp sufficient in size and good in quality. She has one Life Boat one Cutter & one gig.

The Windlass is Harfield's Steam & Good Capstan and Rudder Good Pumps 5" buckets & good.

Engine Room Skylights. How constructed? Iron sitting on iron beam. How secured in ordinary weather? Screws & quadrants.

What arrangements for deadlights in bad weather? Solid circular lights. (bull's eye prisms) bridge.

Coal Bunker Openings. How constructed? 4 ft. beam & 6 iron. How are lids secured? hatch bars & tarp. Height above deck? 4 ft.

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? 5 scuppers, 2 clearing ports forward & 2 aft each 30" x 23" & 2 in bridge sides 21" x 17" on each side of vessel.

Cargo Hatchways. How formed? of 7/8 iron plates riveted to ties through 3 1/2" x 3 1/2" x 3/8" angle irons.

State size Main Hatch No 1 15-10 x 12-0 No 2 23-2 x 14-0 No 3 19-10 x 11-10 No 4 15-10 x 11-0

If of extraordinary size, state how framed and secured? No 1 & 4 have each one strong sh. beam No 3, one deep web

What arrangement for shifting beams? plate; No 2, two deep web plates and all have 3 fore & afters. Coam 24" high

Hatches, If strong and efficient? Yes, Solid, 2 1/2" planks.

Order for Special Survey No. 215

Date 24th Jan 1888

Order for Ordinary Survey No.

Date

No. 55 in builder's yard.

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

2nd. On the plating during the process of riveting

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

4th. When the ship was complete, and before the plating was finally coated or cemented.

5th. After the ship was launched and equipped

Jan 14, 28, 30, Feb. 7, 13, 14, 24, 28,

March 8, 12, 20, 23, 29 April 4, 7,

10, 13, 17, 24, 27 May, 1, 8, 12, 17, 23, 26

June 1, 9, 14, 22, 27, July 6, 7, 11, 17

20, 31 Aug. 1. Total - 38 visits

State dates of letters respecting this case M 22nd Dec 1887. 19th Jan. 22nd June, 9th 10th Aug. 1888. (2nd Jan. to Workman & Co)

General Remarks (State quality of workmanship, &c.) This vessel has been built in accordance

with the approved plans viz. the midship section, deck plan & profile as

amended and which were sent with my letter of the 18th Aug. 88 & Harbour Rep.

the Secretary's letters of above dates, the Committee's circulars on steel,

the Rules of the Society for New-Steel Vessels or equivalent thereto and to

the entire satisfaction of the undersigned.

The ballast tanks have all been pressed as required the Rules.

A fore-castle 28 ft. long, a bridge house 42 ft. and a wheel house aft

17 ft. x 11 ft. have been fitted

Wail's 7th Cement has been put in vessel (except under machine

which is Portland) with full consent of the owners.

The equipment is to be put on board at Glasgow.

The material used in the construction of this steamer and the

workmanship throughout are good & satisfactory.

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

How are the surfaces preserved from oxidation? Inside Wail's 7th Portland Cement & Paint Outside Paint.

I am of opinion this Vessel should be Classed 100 A1 Spar Deck Steel

The amount of the Entry Fee is received by me, 18/9/88

Special 73 : 3 : 6 18/9/88

(to be sent as per margin). Certificate

(Travelling Expenses, if any, £)

Committee's Minute

Character assigned

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel

100 A1 Spar Deck Steel