

IRON SHIP.

Survey held at *Belfast* Date, First Survey *27th Feb 1881* Last Survey *11th March 1881*
 On the *S.S. "Topic" now "Volcan"* Master *Ferguson*
 Tonnage under *241.14* ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Tonnage on Deck *265.28* SPAR, OR AWNING-DECKED VESSEL.
 Tonnage in Forecastle *129.55* HALF BREADTH (moulded) *10.75* Feet.
 Tonnage in Engine Room *129.55* DEPTH from upper part of Keel to top of Upper Deck Beams *11.92*
 Tonnage as out on Beam *129.55* GIRTH of Half Midship Frame (as per Rule) *20.00*
 1st NUMBER *42.67*
 1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet *✓*
 LENGTH *154.00*
 2nd NUMBER *65.71.18*
 PROPORTIONS—Breadths to Length *7.1*
 Depth to Length—Upper Deck to Keel *12.9*
 Main Deck ditto *✓*
 Built at *Belfast*
 When built *1881* Launched *14/1*
 By whom built *MacLuraine & Lewis*
 Owners *W.A. Grant*
 Port belonging to *Belfast*
 Destined Voyage *Whitehead*
 Surveyed while Building, Afloat, or in Dry Dock *✓*

TH Deck as Rule *154* Feet. *0* Inches. BREADTH—Moulded... *21* Feet. *6* Inches. DEPTH top of Floors to Upper Deck Beams *11* Feet. *11* Inches. Do. do. Main Deck Beams *11* Feet. *11* Inches. Power of Engines *50* Horse. No. of Decks with flat laid *one* No. of Tiers of Beams *two*

Dimensions of Ship per Register, length, *155.3* breadth, *21.7* depth, *10.5*

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>7 1/4 x 1 3/4</i>	<i>7 1/4 x 1 3/4</i>
STEM, moulding and thickness	<i>6 1/4 x 1 3/4</i>	<i>6 1/4 x 1 3/4</i>
STERN-POST for Rudder do. do.	<i>6 3/4 x 3</i>	<i>6 3/4 x 3</i>
" for Propeller	<i>6 3/4 x 3</i>	<i>6 3/4 x 3</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>21</i>	<i>21</i>
BEAMS, Angle Iron, for 2/3 length amidships	<i>3 2 1/2 6</i>	<i>3 2 1/2 6</i>
Do. for 1/3 at each end	<i>3 2 1/2 6</i>	<i>3 2 1/2 6</i>
REVERSED FRAMES, Angle Iron	<i>2 1/2 2 1/2 4</i>	<i>2 1/2 2 1/2 4</i>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>12 1/2 x 6</i>	<i>12 x 6</i>
thickness at the ends of vessel	<i>Eng. do. 7</i>	<i>Eng. do. 7</i>
depth at 2/3 the half-bdth. as per Rule	<i>6 1/4</i>	<i>6 1/4</i>
height extended at the Bilges	<i>25</i>	<i>25</i>
BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	<i>5 1/2 3 7</i>	<i>5 1/2 3 7</i>
Single or double Angle Iron on Upper edge	<i>42</i>	<i>42</i>
Average space	<i>42</i>	<i>42</i>
BEAMS, Main, or Middle Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	<i>3</i>	<i>3</i>
Single, or double Angle Iron, on Upper Edge	<i>3</i>	<i>3</i>
Average space	<i>3</i>	<i>3</i>
IS, Lower Deck, Hold, or Orlop Single or double Ang. Iron, Plate or Tee Bulb Iron	<i>3</i>	<i>3</i>
Single or double Angle Iron on Upper Edge	<i>3</i>	<i>3</i>
Average space	<i>3</i>	<i>3</i>
KEELSONS Centre line, single or double plate, box intercostal, Plates	<i>10 x 8</i>	<i>10 x 8</i>
Rider	<i>6 1/2 x 8</i>	<i>6 1/2 x 8</i>
Bulb on intercostal Keelson	<i>3 3 6</i>	<i>3 3 6</i>
Angle Irons	<i>3 3 6</i>	<i>3 3 6</i>
Double Angle Iron Side Keelson	<i>3 3 6</i>	<i>3 3 6</i>
Side Intercostal Plate	<i>3 3 6</i>	<i>3 3 6</i>
do. Angle Irons	<i>3 3 6</i>	<i>3 3 6</i>
Attached to outside plating with angle iron	<i>3 3 6</i>	<i>3 3 6</i>
BILGE Angle Iron	<i>3 3 6</i>	<i>3 3 6</i>
do. do. Iron	<i>3 3 6</i>	<i>3 3 6</i>
do. intercostal plates riveted to plating for length	<i>3 3 6</i>	<i>3 3 6</i>
STRIPER Angle Irons	<i>3 3 6</i>	<i>3 3 6</i>
Intercostal plates riveted to plating by length	<i>3 3 6</i>	<i>3 3 6</i>
SIDE STRINGER Angle Irons	<i>3 3 6</i>	<i>3 3 6</i>
Transoms, material. Knight-heads. Hawse Timbers.	<i>Iron</i>	<i>Iron</i>
Windlass	<i>Iron patent</i>	<i>Pall Btt</i>

	Inches in Ship.	16ths in Ship.	Inches per Rule.	16ths per Rule.
Flat Keel Plates, breadth and thickness	<i>33</i>	<i>8</i>	<i>20</i>	<i>8</i>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges	<i>33</i>	<i>8</i>	<i>20</i>	<i>8</i>
of doubling at Bilge, or increased thickness, and length applied	<i>788</i>	<i>6</i>	<i>788</i>	<i>6</i>
fm up part of Bilge to l. edge of Sh'rstrake.	<i>34</i>	<i>10</i>	<i>33</i>	<i>10</i>
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake.	<i>10</i>	<i>7.5</i>	<i>10</i>	<i>7.5</i>
Up. Spar Dk. Sh'rstrake, brdth & thickness	<i>10.6</i>	<i>105</i>	<i>42</i>	<i>42</i>
Butt Straps to outside plating, breadth & thickness	<i>34</i>	<i>7</i>	<i>34</i>	<i>7</i>
Lengths of Plating	<i>34</i>	<i>7</i>	<i>34</i>	<i>7</i>
Shifts of Plating, and Stringers	<i>34</i>	<i>7</i>	<i>34</i>	<i>7</i>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness	<i>34</i>	<i>7</i>	<i>34</i>	<i>7</i>
Angle Iron on ditto	<i>34</i>	<i>7</i>	<i>34</i>	<i>7</i>
Tie Plates fore and aft, outside Hatchways	<i>14</i>	<i>6</i>	<i>7</i>	<i>6</i>
Diagonal Tie Plates on Beams No. of Pairs	<i>for 2/3 length</i>	<i>7</i>	<i>7</i>	<i>6</i>
Planksheer material and scantling	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
Waterways do. do.	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
Flat of Upper Deck lo. do.	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
How fastened to Beams	<i>gal. nut. & screw bolts</i>	<i>3</i>	<i>3</i>	<i>3</i>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
Is the Stringer Plate attached to the outside plating?	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Angle Irons on ditto, No.	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Tie Plates, outside Hatchways	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Diagonal Tie Plates on Beams, No. of pairs	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Waterways materials and scantlings	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Flat of Middle Deck do. do.	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
How fastened to Beams	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Is the Stringer Plate attached to the outside plating?	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Angle Irons on ditto, No.	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Stringer or Tie Plates outside Hatchways	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Flat of Lower Deck	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Ceiling betwixt Decks thickness and material	<i>Patterns & space</i>	<i>2</i>	<i>2</i>	<i>2</i>
in hold do. do.	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>
Main piece of Rudder, diameter at head	<i>3 3/4</i>	<i>3 3/4</i>	<i>2 1/4</i>	<i>2 1/4</i>
do. at heel	<i>2 1/4</i>	<i>2 1/4</i>	<i>2 1/4</i>	<i>2 1/4</i>
Can the Rudder be unskipped afloat?	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
Bulkheads No. Thickness of	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>
Height up	<i>upper deck</i>	<i>upper deck</i>	<i>upper deck</i>	<i>upper deck</i>
How secured to sides of ship	<i>between double frames</i>	<i>between double frames</i>	<i>between double frames</i>	<i>between double frames</i>
Size of Vertical Angle Irons	<i>2 1/2 x 2 1/2 x 4</i>	<i>2 1/2 x 2 1/2 x 4</i>	<i>2 1/2 x 2 1/2 x 4</i>	<i>2 1/2 x 2 1/2 x 4</i>
Are the outside Plates doubled two spaces of Frames in length?	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>

The FRAMES extend in one length from *Keel* to *gunwale* Riveted through plates with *11/16* in. Rivets, about *5/2* apart.
 The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *upper turn of bilges* and to *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* in. diameter, averaging *5* ins. from centre to centre. *zigzag*
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *3/4* in. diameter, averaging *3 1/2* ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *3/4* in. diameter averaging *3 1/2* ins. from centre to centre.
 Butts of all Strakes at Bilge for *whole* length, *double* riveted with Butt Straps thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double *&* single riveted; with rivets *11/16* in. diameter, averaging *3 1/2* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *3/4* 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 *length* amidships. Butts of Upper *&* Spar Sheerstrake, *double* riveted *whole* length amidships.
 Butts of Main Stringer Plate, treble riveted for *length* amidships. Butts of Upper *&* Spar Stringer Plate, *double* riveted for *whole* length.
 Breadth of laps of plating in double riveting *3 3/4* Breadth of laps of plating in single riveting *2 1/4*
 At Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Treble and double riveting*
 Waterway, how secured to Beams *gutter* (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? *Bracket plates* No. of Breasthooks, *2* Crutches, *2*
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *very good*
 Manufacturer's name or trade mark, *Foyhead & Co*

The above is a correct description.

Builder's Signature, *MacLuraine & Lewis*

Surveyor's Signature, *J.W. Scullard*

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

Lloyd's Register Foundation

Workmanship. Are the butts of plating planed or otherwise fitted? *hammered*
Do the edges of the carvel work and of the butts fit close together throughout their length without requiring any making good of deficiencies? *yes*
Are the fillings between the ribs and plates solid angle pieces? *yes*
Do the holes for riveting plate to frames, struts, 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 facing surfaces? *yes*
Do any rivets break into or through the seams or butts of the plating? *no*

Masts, Bowsprit, Yards, &c., are *Bitch Ken* in *Good* condition, and sufficient in size and length. If of Iron or
Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed,
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—

Two pole masts as auxiliary to the steam power

NUMBER for EQUIPMENT	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate	Inches per Rule	Machine where Tested & Supdt.	ANCHORS.	N ^o .	Weight, ex. Stock.	Test per Certificate	Weight req'd per Rule.	M	when put in
No.		Chain	<i>165-4</i>	<i>15-6</i>	<i>15-7/10</i>	<i>165-15</i>	<i>15-7/10</i>	Bower Anchors		<i>2-14</i>	<i>8-15-2-0</i>	<i>6-1/2</i>		
	Fore Sails,	<i>L. P. H. Lipton</i>			<i>E. R. Smith</i>		<i>4/1/81</i>	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)						
	Fore Top Sails,	Iron Str in Chain	<i>45-3</i>	<i>7</i>	<i>7-10</i>	<i>45-14-6</i>								
	Fore Topmast Stay Sails,	Empn Strm Cbl	<i>75</i>	<i>7</i>		<i>75-7</i>		Stream		<i>0-0-0</i>	<i>4-10-0-0</i>	<i>2-1/2</i>	<i>4</i>	
	Main Sails,	Hawser	<i>90</i>	<i>5</i>		<i>90-5</i>		Kedge		<i>0-0-0</i>		<i>1-1/2</i>		
	Main Top Sails, and	Towlines						Ditto						
		Warp												
		quality food												

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *two* long Boat ~~and~~

The Windlass is *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights. How constructed?

How secured in ordinary weather? *always shipped*

What arrangements for deadlights in bad weather? *thoroughly glazed and fitted on bridge deck*

Coal Bunker Openings. How constructed? *Carb. circular* How are lids secured? *lugs* Height above deck? *flush under bulwark*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *4 Scuppers and 3 ports*

Cargo Hatchways. How formed?

Plates & angles

State size Main Hatch *18-6 x 9-0* Forehatch *19-0 x 9-0* 8 Quarters *7-0 x 7-0*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *Deep web shifting beam and fore & aft fwoods.*

Hatches, if strong and efficient?

yes

Order for Special Survey No. *98*

DATES of Surveys held while building as per Section 18:

- 1st. On the seven parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating, when the same was laid
- 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

*June 1880 - 23 - August 4 - 10 - 30 Sept 7 - 21 - 27
Oct 1 - 19 - 26 Nov 3 - 10 - 12 - 20 Dec 1 - 15
15 - 23 - 29 - 31 - January 1881 - 7 - 14 - 27 - Feb 4
2 - 4 - 17 - 22 - 23 March 11 -*

Order for Ordinary Survey No. *✓*

Date

No. *11*

in builder's yard

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

This one decked vessel has been built in accordance with the midship section submitted and approved of for sister vessel the "Parkmore" Belfast Report No 2719, and in other respects to the Rules for the 100 H grade.

She has a forecabin 28 feet long not enclosed, also a bridge deck 36 feet long upon which the engine skylight and the two boats are stowed.

Break over cabin 17 feet long

The materials of which she is constructed are very good and the workmanship is of a superior character.

This is a sister vessel to the "Parkmore" in Belfast Report No 2719 to which the midship section is attached.

Iron No. 28381

State if one, two, or three decked vessel, or if spar, or wing decked; and the lengths of poop, forecabin, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement & paint* Outside *Paint*

I am of opinion this Vessel should be Classed *100 H.1.*

The amount of the Entry Fee ... *£ 3 : 0 : 0* is received by me, *J. W. Scullard*

Special ... *£ 13 : 5 : 0* *19 March 1881*

Certificate ... *frank*

(Travelling Expenses, if any, £ *✓*).

Committee's Minute

Tuesday March, 22nd. 1881.

Character assigned

100 H.1

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

J. W. Scullard
Lloyd's Register of British and Foreign Shipping
Foundation