

# IRON SHIP.

No. 4277 Survey held at Glasgow Date, First Survey 7<sup>th</sup> February Last Survey 16<sup>th</sup> August 1876  
 On the S. "Glenmorag" Master J. Dawson

<b>TONNAGE</b> under Tonnage Deck } <u>1503.53</u>	ONE OR TWO DECKED, THREE DECKED VESSEL.	Built at <u>Glasgow</u>
<b>Ditto of Third, Spar, or Awning Deck.</b> } <u>79.30</u>	<del>SPAR, OR AWNING DECKED VESSEL.</del>	When built <u>1876</u> Launched <u>22<sup>nd</sup> July 1876</u>
<b>Ditto of Poop, Raised or Blk.</b> } <u>17.80</u>	<b>HALF BREADTH</b> (moulded) .. .. . <u>19.25</u>	By whom built <u>Dobie &amp; Co.</u>
<b>Ditto of Houses on Deck</b> } <u>17.80</u>	<b>DEPTH</b> from upper part of Keel to top of Upper Deck Beams <u>25.33</u>	Owners <u>J &amp; A. Allan</u>
<b>Ditto of Forecastle</b> } <u>47.39</u>	<b>GIRTH</b> of Half Midship Frame (as per Rule) .. .. . <u>38.66</u>	Port belonging to <u>Glasgow</u>
<b>Gross Tonnage</b> } <u>1648.02</u>	<b>1st NUMBER</b> .. .. . <u>83.24</u>	Destined Voyage <u>Not known</u>
<b>Less Crew Spaces</b> } <u>71.67</u>	<del>1st NUMBER, if a THREE DECKED VESSEL</del>	If Surveyed while Building, Afloat, or in Dry Dock.
<b>Less Engine Room</b> } <u>-</u>	<b>LENGTH</b> .. .. . <u>245</u>	
<b>Register Tonnage as cut on Beam</b> } <u>1576.35</u>	<b>2nd NUMBER</b> .. .. . <u>20393</u>	
	<b>PROPORTIONS</b> —Breadths to Length .. .. . <u>6.36</u>	
	<b>Depths to Length</b> —Upper Deck to Keel .. .. . <u>-</u>	
	<b>Main Deck ditto</b> .. .. . <u>9.67</u>	

Official Number

LENGTH on deck as per Rule	Feet. Inches.		BREADTH—Moulded	Feet. Inches.		DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet. Inches.		Power of Engines	Horse.	No. of Decks with flat laid	No. of Tiers of Beams
	Feet.	Inches.		Feet.	Inches.		Feet.	Inches.				
<u>245</u>			<u>38</u>		<u>6</u>	<u>23</u>		<u>3 1/2</u>			<u>Two</u>	<u>Two</u>
Dimensions of Ship per Register, length, <u>255.1</u> breadth, <u>38.6</u> depth, <u>22.85</u>												
Inches in Ship. Per Section & Inches per Rule.												
<b>KEEL</b> , depth and thickness	<u>9 1/2</u>	<u>2 1/2</u>	<u>9 1/2</u>	<u>2 1/2</u>	<u>9 1/2</u>	<u>2 1/2</u>	<u>9 1/2</u>	<u>2 1/2</u>				
<b>STEM</b> , moulding and thickness	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>2 1/2</u>				
<b>STERN-POST</b> for Rudder do. do. for Propeller	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>2 1/2</u>	<u>9</u>	<u>2 1/2</u>				
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>24</u>		<u>24</u>		<u>24</u>		<u>24</u>					
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
Do. for 1/2 at each end	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>	<u>5</u>	<u>3 1/2</u>				
<b>REVERSED FRAMES</b> , Angle Iron	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>				
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	<u>24 1/2</u>	<u>10</u>	<u>24 1/2</u>	<u>10</u>	<u>24 1/2</u>	<u>10</u>	<u>24 1/2</u>	<u>10</u>				
thickness at the ends of vessel	<u>9</u>	<u>8</u>	<u>9</u>	<u>8</u>	<u>9</u>	<u>8</u>	<u>9</u>	<u>8</u>				
depth at 3/4 the half-bdth. as per Rule	<u>12 1/4</u>	<u>-</u>	<u>12 1/4</u>	<u>-</u>	<u>12 1/4</u>	<u>-</u>	<u>12 1/4</u>	<u>-</u>				
height extended at the Bilges	<u>12 1/4</u>	<u>-</u>	<u>12 1/4</u>	<u>-</u>	<u>12 1/4</u>	<u>-</u>	<u>12 1/4</u>	<u>-</u>				
<b>BEAMS</b> , Upper, Spar, or Awning Deck	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>				
Single or double Angle Iron, Plate or Tee Bulb Iron	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>	<u>3 1/2</u>	<u>3</u>				
Single or double Angle Iron on Upper edge	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>				
Average space	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>				
<b>BEAMS</b> , Main, or Middle Deck	<u>9 1/2</u>	<u>9</u>	<u>9 1/2</u>	<u>9</u>	<u>9 1/2</u>	<u>9</u>	<u>9 1/2</u>	<u>9</u>				
Single or double Angle Iron, Plate or Tee Bulb Iron	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>				
Single or double Angle Iron on Upper Edge	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>				
Average space	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>				
<b>BEAMS</b> , Lower Deck, Hold, or Orlop	<u>18</u>	<u>13</u>	<u>18</u>	<u>13</u>	<u>18</u>	<u>13</u>	<u>18</u>	<u>13</u>				
Single or double Angle Iron, Plate or Tee Bulb Iron	<u>12</u>	<u>13</u>	<u>12</u>	<u>13</u>	<u>12</u>	<u>13</u>	<u>12</u>	<u>13</u>				
Single or double Angle Iron on Upper Edge	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
Average space	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>	<u>48</u>	<u>-</u>				
<b>KEELSONS</b> Centre line, single or double plate, box, or intercostal, Plates	<u>18</u>	<u>13</u>	<u>18</u>	<u>13</u>	<u>18</u>	<u>13</u>	<u>18</u>	<u>13</u>				
" Rider Plate	<u>12</u>	<u>13</u>	<u>12</u>	<u>13</u>	<u>12</u>	<u>13</u>	<u>12</u>	<u>13</u>				
" Bulb Plate to Intercostal Keelson	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
" Angle Irons	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
" Double Angle Iron Side Keelson	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
" Side Intercostal Plate	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
" do. Angle Irons	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>				
" Attached to outside plating with angle iron	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>				
<b>BILGE</b> Angle Irons	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
" do. Bulb Iron	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
" do. Intercostal plates riveted to plating for length	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
<b>BILGE STRINGER</b> Angle Irons	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
Intercostal plates riveted to plating for length	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
<b>SIDE STRINGER</b> Angle Irons	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>	<u>5 1/2</u>	<u>4</u>				
Transoms, material. Knight-heads. Hawse Timbers.	Iron											
Windlass	Harfield's Patent											
Pall Bitt	-											

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.

The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Main deck and to throughout 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 1/8 in. diameter, averaging 5 3/8 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 1/2 length, treble riveted with Butt Straps 1/16 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 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 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?

Waterway, how secured to Beams Gutter (Explain by Sketch, if necessary.)

Beams of the various Decks, how secured to the sides? By knees turned down No. of Breasthooks, Seven Crutches, Seven

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

Manufacturer's name or trade mark, Angles and Bulb, Mossend, Plates Fox Head & Co.

The above is a correct description.

Builder's Signature, Dobie & Co. Surveyor's Signature, Saml. Laphoon

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

120N468-0060

**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? *Yes*  
 Are the fillings between the ribs and plates solid single pieces? *Yes*  
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes* 16914 Jm  
 Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*  
 Do any rivets break into or through the seams or butts of the plating? *No.*

Masts, Bowsprit, Yards, &c., are *all* 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 *Three Masts Ship Rigged*  
*Bowsprit, fitted and secured by Gunmonny and Knight-head plate. Spans at length-heads 23 in all caps - 4 plates in circle 9 1/2. diaphragm plate 10 1/4 long 1 9/16. double riveted edges triple riveted butts*  
*Fore Mast 90.3 - 32. 24 1/2. 26. 23. 4 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*  
*Main Mast 85.3 - 32. 22 3/4. 24 1/2. 21 1/2. 4 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*  
*Fore & Main Masts 54.0 - 27. 10 1/2. 10 1/2. 3 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*  
*Fore & Main Masts 42.0 - 18. 8 1/4. 8 1/4. 3 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*  
*Fore & Main Masts 37.0 - 17 1/2. 8 1/4. 8 1/4. 3 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*  
*Mizzen Mast 58.0 - 14 1/2. 7 1/4. 7 1/4. 3 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*  
*Mizzen Mast 54.0 - 13 1/2. 7 1/4. 7 1/4. 3 plates in circle 9 1/2. double riveted in way of wedging for 16 ft. double riveted edges triple riveted butts*

NUMBER for EQUIPMENT 21752		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N <sup>o</sup> .	SAILS.	CABLES, &c. Chain		273	1 15/16	67 1/2	270	1 15/16				
	Fore Sails,	Hemp					Bowers	1	37.2.14	34.4.1.14	36 1/2	33 5/20
	Fore Top Sails,	Hemp					Stock	1	9.0.10			
	Fore Topmast Stay Sails	Hemp					Stock	1	37.0.14	38.16.3.14	36 1/2	33 5/20
	Main Sails,	Hemp		60	1 1/4	90-1 1/6 or 90, 11 Hemp	Stock	1	8.3.0		31	29 1/20
	Main Top Sails,	Hemp		90	4	90-10 1/2	Stock	1	31.0.6	29.8.1.21		
	and	Hemp		90	10	90-6 1/2	Total	1	8.0.7	Total	10 1/4	
		Hemp		90	8		Stream	1	14.0.17		14	
		Hemp					Kedges	1	7.1.7.5		7	
		Hemp							3.3.15		3 1/2	

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *Five* Long Boats and *2* fitted with buoyancy.  
 The Windlass is *Good* Capstan *3*. *Good* and Rudder *Good* Pumps *Good* Efficient (*Wallace's*)

Engine Room Skylights.—How constructed? *—* How secured in ordinary weather? *—*  
 What arrangements for deadlights in bad weather? *—*

Coal Bunker Openings.—How constructed? *—* How are lids secured? *—* Height above deck? *—*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Five Water ports, Five Scuppers and Two side pipes each side*

Cargo Hatchways.—How formed? *Plate and Angle iron*  
 State size *Main Hatch 16x10* Forehatch *7x6* Quarterhatch *8x7*

If of extraordinary size, state how framed and secured? *Portable Beam at Main Hatch*  
 What arrangement for shifting beams? *—*

Hatches, If strong and efficient? *Yes.*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.	
1117	Decr. 3/75			85		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid...	When the ship was complete, and before the plating was finally coated or cemented..	After the ship was launched and equipped	1876 - Febry 7, 10, 14, 16, 19, 22, 24, 29, March 4, 7, 10, 15, 16, 21, 24, 28 - April 4, 5, 11, 12, 17, April 22, 24, 26, 29 - May 3, 8, 11, 15, 16, 23, 26, May 30 - June 1, 2, 6, 9, 12, 15, 19, 23, 24, 29, July 4, 6, 11, 21, 25, Augt 2, 9, 16th

General Remarks (State quality of workmanship, &c.)  
*The workmanship is of good quality, Built in accordance with sketch of midship section approved per Secretary's Letter of 11<sup>th</sup> Decr 1875 and in general conformity with the Rules with a view to the grade contemplated*

*The position of Collision bulkhead and securities against parting forward are as per approved sketch herewith*

*Fitted with Poop 34 feet long, Forecastle 35 feet long and Midship Deck House 41x12.9*

State if one, two, or three, decked vessel, or if open, or running decked, and the lengths of poop, forecastle, and the lengths of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement and Paint* Outside *Paint*  
 I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee ... £ 5 : : : is received by me, *Saml. Laphorn*  
 Special ... £ 64 : 8 : *Augt 9<sup>th</sup> 1876*  
 Certificate ... *British*  
 (Travelling Expenses, if any, £ ... )

Committee's Minute *18<sup>th</sup> August 1876*  
 Character assigned *100 A 1*  
*Doc 100 A 1*

