

IRON SHIP.

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

TONNAGE under 1503.53 ONE OR TWO DECKED, THREE DECKED VESSEL.
Tonnage Deck 79.30 SPAR, OR AWNING-DECKED VESSEL.
Ditto of Third, Spar, or Awning Deck. 17.80 HALF BREADTH (moulded) 19.25
Ditto of Poop, or Raised Or. Pl. 47.39 DEPTH from upper part of Keel to top of Upper Deck Beam 25.33
Ditto of Houses on Deck 1648.02 GIRTH of Half Midship Frame (as per Rule) 38.66
Gross Tonnage 71.67 1st NUMBER 83.24
Less Crew Space 1576.35 1st NUMBER, if a THREE DECKED VESSEL -
Loss Engine Room - LENGTH 245
Register Tonnage 1576.35 2nd NUMBER 20393
as cut on Beam - PROPORTIONS—Breadths to Length 6.36
Depths to Length—Upper Deck to Keel -
Main Deck ditto 9.67

Built at Glasgow
When built 1876 Launched 22nd July 1876
By whom built Dobie & Co.
Owners J & A. Allan
Port belonging to Glasgow
Destined Voyage Not Known
Surveyed while Building, Afloat, or in Dry Dock.

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

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 clench, 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 clench, 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 Knives 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.

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 to Gunwain and Knight-head plate. Spacing at 18 inch - heads 23 in all caps - 4 plates in circle 9 1/2. diaphragm plate 10 1/2 long 1 1/2 double riveted edges triple riveted butts
Fore Mast 90.3 - 32. 24 1/2. 26. 23. 23. 4 plates in circle 9 1/2 double riveted in way of wedging for 16 ft. double riveted edges
Main Mast 85.3 - 32. 22 1/2. 24 1/2. 21 1/2. triple riveted butts
Mizen Mast 54.0 - 27. 18. 17 1/2. 16. 15. 3 plates in circle 6 1/2 double riveted edges, triple riveted butts
Fore & Main lower Topmasts 42.0 - 18. 17 1/2. 16. 15. 3 plates in circle 6 1/2 double riveted edges, triple riveted butts
Fore & Main upper Topmasts 30.0 - 17 1/2. 16. 15. 3 plates in circle 6 1/2 double riveted edges, triple riveted butts
Mizzen lower Topmast 58.0 - 14 1/2. 14 1/2. 13 1/2. 3 plates in circle 6 1/2 double riveted edges, triple riveted butts
Mizzen upper Topmast 54.0 - 13 1/2. 13 1/2. 12 1/2. 3 plates in circle 6 1/2 double riveted edges, triple riveted butts
double at ships for 10 ft.

NUMBER for EQUIPMENT 21752		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wt't req'd per Rule.	Test req'd per Rule.
No.	SAILS.	273		67 1/2	270	1 15/16	Bowers	Stock	37.2.14	34.4.1.14	36 1/2	33 5/20
	Fore Sails,							Stock	37.0.14	38.16.3.14	36 1/2	33 5/20
	Fore Top Sails,							Stock	31.0.6	29.8.1.21	31	29 7/20
	Fore Topmast Stay Sails							Stock	8.0.7			
	Main Sails,							Total	105.3.6	Total	104	
Two Sub	Main Top Sails,						Stream		14.0.17		14	
	Warp						Kedges		7.3.7.5		3 1/2	
	and											

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* Fore hatch *7x6* Quarter hatch *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. <i>1117</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	1876 - Feb'y 7. 10. 14. 16. 19. 22. 24. 29. March 4. 7.
Date <i>Decr. 3/75</i>		2nd. On the plating during the process of riveting	March 10. 15. 16. 21. 24. 28 - April 4. 5. 11. 12. 17.
Order for Ordinary Survey No. <i>—</i>		3rd. When the beams were in and fastened, and before the decks were laid...	April 22. 24. 26. 29 - May 3. 8. 11. 15. 16. 23. 26.
Date <i>—</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	May 30 - June 1. 2. 6. 9. 12. 15. 19. 23. 24. 29.
No. <i>85</i> in builder's yard.		5th. After the ship was launched and equipped	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 11th 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, forecabin, or raised quarter deck, and the length 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 9th 1876*
Certificate ... *British*
(Travelling Expenses, if any, £ *—*).

Committee's Minute *18th August 1876*
Character assigned *100 A 1*
Doc 1 WJ
Lloyd's Register
Foundation