

IRON SHIP.

No. 3885 Survey held at Glasgow Date, First Survey 11 Decr 1873 Last Survey 19 August 1874

On the S.S. Fishing (Brig) Yard Number 70 Master Robert Tannahill
Built at Glasgow

When built 1874 Launched 30 June
By whom built Aitken & Mansel
Owners William Ross & Co.
Port belonging to Glasgow
Destined Voyage Glasgow to America
Surveyed while Building, Afloat, or in Dry Dock.

TONNAGE under Tonnage Deck 1753.40
Ditto of Third, Spar, or Awning Deck 764.08
Ditto of Poop, or Raised Qr. Dk. 2517.48
Ditto of Houses on Deck 62.07
Ditto of Forecastle
Gross Tonnage 2579.55
Less Crew Space 74.28
Less Engine Room 573.58
Register Tonnage as cut on Beam 1931.69

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
HALF BREADTH (moulded) 18.4
DEPTH from upper part of Keel to top of Upper Deck Beams 29.3
GIRTH of Half Midship Frame (as per Rule) 43.1
1st NUMBER 90.8
1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 83.8
LENGTH 347.5
2nd NUMBER 29120
PROPORTIONS—Breadths to Length 9.45
Depths to Length—Upper Deck to Keel 11.86
Main Deck ditto 15.94

LENGTH on deck as per Rule 347.6 BREADTH Moulded 36.9 DEPTH top of Floors to Upper Deck Beams 27.2 Do. do. Main Deck Beams 19.8 Power of Engines 350 Horse. 350 N^o. of Decks with flat laid 3 N^o. of Tiers of Beams 3

Dimensions of Ship per Register, length, 350.9 breadth, 37.2 depth, 27.1

KEEL, depth and thickness 11 x 2 3/4
STEM, moulding and thickness 11 x 2 3/4
STERN-POST for Rudder do. do. 11 x 5 1/2
for Propeller 24 in
Distance of Frames from moulding edge to moulding edge, all fore and aft 24 in
FRAMES, Angle Iron, for 1/2 length amidships 5 3/4 x 8
Do. for 1/4 at each end 5 3/4 x 7
REVERSED FRAMES, Angle Iron 3 1/2 x 10
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 24 1/2
thickness at the ends of vessel 9.8
depth at 3/4 the half-bdth. as per Rule 12 1/4
height extended at the Bilges 12 1/4
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron 7 3/4 x 5
Single or double Angle Iron on Upper edge 48
Average space 48
BEAMS, Main or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron 9 x 9
Single or double Angle Iron on Upper Edge 3 1/2 x 7
Average space 48
BEAMS, Lower Deck, Hold or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron 9 x 9
Single or double Angle Iron on Upper Edge 3 1/2 x 7
Average space 48
KEELSONS Centre line, single or double plate, 21
do. or Intercoastal, Plates 14
Rider Plate 9
Bolt Plate to Intercoastal Keelson 10
Angle Irons 6 1/2 x 4
Double Angle Iron Side Keelson 9
Side Intercoastal Plate 25
do. Angle Irons 6 1/2 x 4
Attached to outside plating with angle iron 3 1/2 x 8
BILGE Angle Irons 6 1/2 x 4
do. Bulb Iron 9
do. Intercoastal plates riveted to plating for 1/2 length 9
BILGE STRINGER Angle Irons 6 1/2 x 4
Intercoastal plates riveted to plating for 3/5 length 9
SIDE STRINGER Angle Irons 6 1/2 x 4

Flat Keel Plates, breadth and thickness 36
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied Intercoastal 36 ft x 3/5
fm up. part of Bilge to lr. edge of Sh'rstrake
Main Sheerstrake, breadth and thickness 40
of doubling at Sh'rstrake, & length applied 40
from Mn. to Upr. or Spar Dk. Sh'rstrake.
Up. or Spar Dk Sh'rstrake, brdth & thickness 40
Butt Straps to outside plating, breadth & thickness 11 1/2 x 16 1/2
Lengths of Plating 10 1/2
Shifts of Plating, and Stringers 3 1/2
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 70
Angle Iron on ditto 4 x 4 x 9
Tie Plates fore and aft, outside Hatchways 16
Diagonal Tie Plates on Beams No. of Pairs 16
Plankboard material and scantling 4
Waterways do. do. 4
Flat of Upper Deck do. 4
How fastened to Beams 4
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 87
Is the Stringer Plate attached to the outside plating? yes
Angle Irons on ditto, No. 2
Tie Plates, outside Hatchways 16
Diagonal Tie Plates on Beams, No. of pairs 16
Waterways materials and scantlings 4
Flat of Middle Deck do. do. 4
How fastened to Beams 4
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 42
Is the Stringer Plate attached to the outside plating? yes
Angle Irons on ditto, No. 2
Stringer or Tie Plates, outside Hatchways 16
Flat of Lower Deck 16
Ceiling betwixt Decks, thickness and material 3
in hold do. do. 3
Main piece of Rudder, diameter at head 2 1/2
do. at heel 1 3/4
Can the Rudder be unshipped afloat? yes
Bulkheads No. 5 Thickness of 7 x 6
Height up 48
How secured to sides of ship Intercoastal plates
Size of Vertical Angle Irons 3 1/2 x 3.8 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? yes

Transoms, material. Knight-heads. Hawse Timbers. Iron
Windlass Patent iron Pall Bitt none

The FRAMES extend in one length from Middle Line 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 about Main Deck Stg and to Upper Deck Stg 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 1/8 in. diameter, averaging 5 1/2 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 3 Strakes at Bilge for half 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 1/2 length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.
Breadth of laps of plating in double riveting 6 in Breadth of laps of plating in single riveting 3 in

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
Waterway, how secured to Beams Both ends butts (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? Forged Beams on Beams No. of Breasthooks, 5 Crutches, 5
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. Best quality Glasgow Iron 6 1/2 for Beams & 16 1/2 for Plates
Manufacturer's name or trade mark, Connell & Co.

The above is a correct description.
Builder's Signature, Aitken & Mansel Surveyor's Signature, James Watson

Workmanship. Are the butts of plating planed or otherwise fitted? Yes 13226 Iron
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
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? A few

Masts, Bowsprit, Yards, &c., are now 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

Fore Mast 81' 6" } Iron. Three plates in the round, edges double, butts tubed & double
Main Mast 92' 0" } riveted. Diameter 26 1/2 inches 7/16 to 1/4 in thickness

NUMBER for EQUIPMENT 31553			Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o . One Suit and Spare and	SAILS.	CABLES, &c.	302	1 15/16	67 30 Tons	300.1 1/2	67 30 Tons	Bowers	3	38.0.7	34.11.2.14	36 1/2	38 30 Tons
	Fore Sails,	Chain ...	Riving House Tipton 16 June 1874										
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	Samuel Hargreaves										
	Fore Topmast Stay Sails	Strm Cbl	Bushing Straps applied to Links of each 15 fathoms 94 30 Tons.										
	Main Sails,	Hawser ...	90	1 1/4	90	12 1/6	90.12 1/6	Stream	1	13.2.14		14.0.0	
Main Top Sails,	Towlines	Warp ...	90	12	90	12	90.12	Kedges	2	13.2.14		7.0.0	
	Warp ...	quality	90	8	90	8	90.8					3.2.9	

Standing and Running Rigging Iron & Hemp sufficient in size and good in quality. She has Two Long Boats and 5 others
The Windlass is Compton & Walker Capstan Iron and Rudder Good Pumps One 6 1/2 in each hold.
Engine Room Skylights.—How constructed? Iron and Glass How secured in ordinary weather? Bars and Glass
What arrangements for deadlights in bad weather? Deadlights
Coal Bunker Openings.—How constructed? Iron How are lids secured? Weld Height above deck? Flush
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Flush deck

Cargo Hatchways.—How formed? Plate and Angle iron
State size Main Hatch 15' 11" x 9' 10" Forehatch 7' 11" x 7' 5" Quarterhatch 15' 10" x 9' 10"
If of extraordinary size, state how framed and secured? Usual Size
What arrangement for shifting beams? One across main & after hatches.
Hatches, If strong and efficient? Yes

Order for Special Survey No. <u>929</u>	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	1873 Nov 11. 15. 18. 21. 24. 28. Dec 1. 5. 9. 10. 12. 16. 23. 24. 27.
Date <u>8 Oct. 1873</u>		2nd. On the plating during the process of riveting	Aug 7. 8. 12. 22. 23. 26. 29. 31. Sep 3. 5. 9. 10. 13. 16. 27.
Order for Ordinary Survey No. <u>✓</u>		3rd. When the beams were in and fastened, and before the decks were laid...	Mar 2. 5. 6. 10. 13. 16. 18. 21. 26. 28. 31. Apr 1. 3. 6. 7. 9. 15. 17. 22.
Date <u>✓</u>		4th. When the ship was complete, and before the plating was finally coated or cemented...	24. 28. May 1. 7. 19. 20. 28. June 5. 10. 16. 19.
No. <u>70</u> in builder's yard.		5th. After the ship was launched and equipped	25. 30. July 7. Aug 6. 12. 19. 1874

General Remarks, (State quality of workmanship &c.) The Workmanship in this vessel is of good quality and she is built in accordance with this section attached and in general conformity with the Rules. In addition the upper deck is plated all fore and aft each side of Hatchways and the Main deck is plated over Engine and Boiler. The strength as shown on tracings has been supplied in Engine and Boiler space, and a shaft each side at upper turn of Bldgs is doubled for 200 feet. Sufficient strength has been provided against painting.

State if one, two or three decked vessel, or if spar or arming decked, and length of poop, forecabin or raised quarter deck, or 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 A 1
The amount of the Entry Fee ... £ 5 : : is received by me,
Special ... £ 84 : 18 : 6 (19th Aug. 1874)
Certificate ... Entry
(Travelling Expenses)
(if any) £ 4 : 4 :
Committee's Minute 25th August 1874
Character assigned 100 A 1
Three Decks
Free
Lawrence
This vessel appears eligible to be classed as 100 A 1
Lloyd's Register Foundation