

IRON SHIPS.

No. 5537 Survey held at Port Glasgow Date now named 26th March 1869
 on the Iron Ship "Agnes Muir" "Adele" Master John Living
 Tonnage under tonnage deck 798.72
 Ditto of poop or spar deck 45.88
 Ditto of engine room 32.48
 Total Register tonnage 901.31
 Gross Tonnage 50.75
 Cross Tonnage 51.16

Built at Port Glasgow When built 1869 Launched 13th March 1869.
 By whom built Robert Duncan & Co Owners P. Henderson & Co.

Port belonging to Glasgow Destined Voyage New Zealand

Surveyed while Building, Afloat, or in Dry Dock While Building and Afloat.

Length aloft	Feet. Inches.	Extreme Breadth	Feet. Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet. Inches.	Horse.	N°. of Decks
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(Dimensions of Ship per Register, length 197 1/2 breadth 32 1/2 depth 19 1/2)

Keel, I-bar iron, depth and thickness.....	Inches in Ship.	required per Rule, for 100 tons Scale.	Plates in Garboard Strakes, breadth and thickness	Inches in Ship.	16ths. In Ship.	Inches required per Rule.	16ths required per Rule.
" plate iron, breadth and thickness	<u>7 1/4 x 2 3/4</u>	<u>7 1/4 x 2 3/4</u>	" from Garboard to upper part of Bilges	<u>30</u>	<u>1 1/4</u>	<u>30</u>	<u>1 1/4</u>
I-bar iron, moulding and thickness	<u>7 1/4 x 2 3/4</u>	<u>7 1/4 x 2 3/4</u>	" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/8ths the entire depth of Hold	<u>—</u>	<u>1 1/4</u>	<u>—</u>	<u>1 1/4</u>
" if plate iron, breadth and thickness	<u>7 1/4 x 2 3/4</u>	<u>7 1/4 x 2 3/4</u>	" from 3/8ths depth of Hold to lower edge of Sheerstrake	<u>—</u>	<u>3/8</u>	<u>—</u>	<u>3/8</u>
Stern-post, I-bar iron, moulding and thickness	<u>7 1/4 x 2 3/4</u>	<u>7 1/4 x 2 3/4</u>	" Sheerstrake, breadth and thickness	<u>30</u>	<u>1 1/4</u>	<u>30</u>	<u>1 1/4</u>
" if plate iron, breadth and thickness	<u>—</u>	<u>—</u>	Butt Straps to outside plating, breadth and thickness	<u>10</u>	<u>1 1/4</u>	<u>10</u>	<u>1 1/4</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>23</u>	<u>23</u>	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	<u>32</u>	<u>1 1/4</u>	<u>27 3/4</u>	<u>9 1/2</u>
Frames, Size of Angle Iron, single or double	<u>4</u> <u>3</u> <u>1/16</u>	<u>4 1/4</u> <u>3</u> <u>1/16</u>	Angle Iron on ditto	<u>5 x 3 1/2 x 1 1/2</u>	<u>12 1/2 x 3 1/2 x 1 1/2</u>	<u>12 1/2 x 3 1/2 x 1 1/2</u>	<u>12 1/2 x 3 1/2 x 1 1/2</u>
" Reversed Iron, to every frame	<u>3</u> <u>3</u> <u>7/16</u>	<u>3</u> <u>2 3/4</u> <u>7/16</u>	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<u>12</u> <u>3/4</u>	<u>1 1/4</u>	<u>3/4</u>	<u>3/4</u>
Floors, depth and thickness of Floor Plate at mid line	<u>—</u> <u>22</u> <u>7/16</u>	<u>—</u> <u>21</u> <u>1/4</u>	Diagonal Tie Plates on ditto	<u>12</u> <u>3/4</u>	<u>1 1/4</u>	<u>1 1/4</u>	<u>1 1/4</u>
" Ditto ditto at Bilge Keelson	<u>—</u> <u>13</u> <u>7/16</u>	<u>—</u> <u>—</u> <u>7/16</u>	Planksheer, materials and scantlings	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Size of Reversed Angle Iron, No. one at top of Floor Plate	<u>3</u> <u>3</u> <u>7/16</u>	<u>3</u> <u>2 3/4</u> <u>7/16</u>	Waterway ditto ditto	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Beams, Deck (No. —) double Angle Iron, Plate, Tee, or Bulb Iron	<u>—</u> <u>7 1/2</u> <u>9/16</u>	<u>—</u> <u>7 1/2</u> <u>9/16</u>	Flat of Upper Deck, thickness and material	<u>5 x 3 1/2</u>	<u>—</u>	<u>3 1/2</u>	<u>—</u>
" double or single Angle Iron, on top edge	<u>3</u> <u>3 1/2</u> <u>9/16</u>	<u>3</u> <u>2 1/2</u> <u>6 1/8</u>	" how fastened to Beams	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
" average space between	<u>46ins.</u> <u>—</u>	<u>46ins.</u> <u>—</u>	Ceiling betwixt Decks and in Hold, thickness and material	<u>bottoms 6x2 1/2</u>	<u>—</u>	<u>—</u>	<u>—</u>
" Hold, or Lower Deck (No. —) double Angle Iron, Plate, Tee, or Bulb Iron	<u>—</u> <u>8</u> <u>7/16</u>	<u>—</u> <u>8</u> <u>7/16</u>	Clamps or Spirketting ditto	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
" double or single Angle Iron, on top edge	<u>3</u> <u>3 1/2</u> <u>7/16</u>	<u>3</u> <u>3</u> <u>7/16</u>	Stringer Plates on ends of Hold or Lower Deck Beams, breadht and thickness	<u>2 1/2</u> <u>7/16</u>	<u>20 1/2</u>	<u>3 1/2</u>	<u>—</u>
" average space between	<u>46ins.</u> <u>—</u>	<u>46ins.</u> <u>—</u>	Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	<u>5 1/2</u> <u>7/16</u>	<u>12</u>	<u>7/16</u>	<u>12</u>
Paddle, sided and moulded, thickness of Plate size of Angle Iron)	<u>—</u> <u>—</u> <u>—</u>	<u>—</u> <u>—</u> <u>—</u>	Stringers in Hold, fore and aft	<u>5 x 3 1/2 x 4 1/2</u>	<u>5 x 12 x 9 1/2</u>	<u>—</u>	<u>—</u>
Engine " " "	<u>—</u> <u>—</u> <u>—</u>	<u>—</u> <u>—</u> <u>—</u>	Flat of Lower Deck, thickness and material	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
son, single or double plate, box or intercostal Size of Plates	<u>—</u> <u>26</u> <u>7/16</u>	<u>—</u> <u>26</u> <u>7/16</u>	Main piece of Rudder, diameter at head	<u>5 1/2</u> <u>—</u>	<u>5 1/2</u>	<u>—</u>	<u>—</u>
Size of Angle Irons	<u>5</u> <u>3 1/2</u> <u>9/16</u>	<u>5</u> <u>4</u> <u>7/16</u>	" at heel	<u>3</u> <u>—</u>	<u>3</u>	<u>—</u>	<u>—</u>
Side, single or double, plate, box, or intercostal Bilge (No. one at each Bilge, single or double, plate or box	<u>—</u> <u>—</u> <u>6 1/2</u>	<u>—</u> <u>—</u> <u>6 1/2</u>	(Can the Rudder be unshipped afloat Yes	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
soms, material two sheets or, if none, in what manner compensated for. ght-heads, and Hawse Timbers back and bow respectively. Frames extend in one length from keel to stern. The reverse angle irons on the floors extend in one length across the middle line from turn of bilge to opposite turn of bilge, and " " " on the frames " " " from turn of bilge to stern and Lower deck alternately. Keelson, how are the various lengths of plates or angle irons connected? Butt plates to keelson lapped 18ins, remainder by butt straps. Plates, Garboard, double or riveted to keel, double or at upper edge, with rivets (1/4 to 3/8 ins.) diameter, averaging (4 to 5 1/2 ins.) apart. Edges from Garboards to upper part of bilge, worked clench, double or single riveted; with rivets (7/8 in.) diameter, averaging (3 1/2 ins.) apart. Butts from keel to turn of bilge, worked carvel with butt straps (1/2 to 3/4 in.) thick, double or single riveted; with rivets (7/8 in.) diameter, averaging (3/2 ins.) apart. Do the butt straps lap over and rivet through the lands of the stave below? No! Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clench, double or single riveted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart. Do the butt straps lap over and rivet through the lands of the stave below? No! Edges of Sheerstrake, double or single riveted? At upper edge Single. At lower edge Double. Butts from bilge to plankshears, worked carvel with butt straps (1/2, 7/8 and 1 1/2 in.) thick, double or single riveted; with rivets (7/8 in.) diameter, averaging (3/2 ins.) apart. Breadth of laps in double rivetting (4 1/2 ins.) Breadth of laps in single rivetting (2 1/2 ins.) all double riveted. Butt Straps of Keelsons, Stringer and Tie Plates, double or single riveted? All double riveted. Planksheer, how secured to the plating of the sides Explain by sketch } Gutter Waterway cemented. Waterway " " planksheer and to the Beams if necessary. Deck Beams, how secured to the side? Properly turned knees twice and a half the depth of beam in length. Hold or Lower Deck ditto In a similar manner to the deck Beams. Paddle " " " No. of breasthooks three. What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Consett. Manufacturer's name or trade mark Mossend Iron Company and Consett Iron Company. We certify that the above is a correct description of the several particulars therein given.							

Builder's Signature

R. D. Duncan

Surveyor's Signature

William S. D.

6962 Iron

- Workmanship.** Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double riveted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? Yes.
- Do the edges of the carvel work and of the butts fay close together throughout their length without requiring any making good of deficiencies? Yes.
- Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid with Single-pieces.
- Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes. and are the rivet holes well and sufficiently countersunk in the outer plate? Yes.
- Are there any rivets which either break into or have been put through the seams or butts of the plating? See first in Butts!

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. (If they are of Iron or Steel give the 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 rivetting, quality of Materials, and if stamped with Maker's name. Mast made on Copper plates.)

Masts & Bowsprit. Material used in Masts & Bowsprit. Quality of Masts & Bowsprit. Riveting. Butt Angles. Section of Mast. Bowsprit.

Fore Main Mizzen Bowsprit	27ms 22 - 27 - 16ps	Iron	29ms 32 - 32 - 20	Spine double. Selle. 4x3x1/2	32ms 4x3x1/2
Main Mizzen Bowsprit	22 - 22 - 16ps	"	32 - " - 32 - 20	4x3x1/2	32 - 3x3x1/2
Fore Main Mizzen Bowsprit	27 - 27 - 16ps	Steel	48 - 32 - 20	3 - " - 4x3x1/2	4x3x1/2
Fore Main Mizzen Bowsprit	16ps	Steel	16.46.478	20 - 48 - No angle Plates double in slugs.	4x3x1/2

Certificate for masts issued from Margate Public Hatchway signed by T. Taylor Surveyor, and for Chains from Doffordham Hatchway signed Mr. R. Read.

She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N.	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
Fore Sails,	Chain	12 ft.	150	150	47½	19½	Links	1	27.0 - 20.0 - 17	25½	25 fathoms	
Fore Top Sails,	Chain	53.68.15	150	150	47½	19½	Bowers	1	4.1.21			
Fore Topmast Stay Sails	Stream Cable	90	7/8	-	7/8	-	Stock		26.5 - 16.5 - 14	26½	25	
Main Sails,	Hawser	90	10½	-	10	90 fathoms	Stock	1	14.2.14			
Main Top Sails.	Towlines	90	7½	-	8	7	Steam	1	22.2 - 22.5 - 0.021.2.20	22½	22½	
and all good.	Warp	90	5	-	5	Each	Stock		4.0.5			
	All of good quality.	90	4	-	5	Each	Kedges	1	5.0.17	5½		
									2.2.14	23½		

Her Standing and Running Rigging is sufficient in size and good in quality.

She has One Long Boat and One Life Boat and two others.

The present state of the Windlass is good. Capstan good and Rudder good. Pumps good. She has also two fixed Winches and one portable one.

Order for Special Survey	DATES of Surveys held	1st. On the several parts of the frame, when in place, and before the plating was wrought	Specially Surveyed
No. 447.	Date 26 Decr 1867	2nd. On the plating during the progress of rivetting	while building from
Built from the 32 -	as per	3rd. When the beams were in and fastened, and before the decks were laid	Nov 1867 to
Order for Ordinary Survey	Date	4th. When the ship was complete, and before the plating was finally coated	March 1868, in all
No. —	Section 18.	5th. After the ship was launched	37. Years.

State if she has a Spar Deck None Poop Yes or Forecastle Yes.

General Remarks,

This vessel has been built under Special Survey, order No. 440. Fitted with full Poop and forecastle, and a room on deck, for part of the crew. Is also fitted with a bow port, on each bow, leading to the two decks and hold respectively, the same being substantially iron-framed. The ports themselves are made of East India teak, and secured with iron port-bars, screw bucklers, hooks and eyes, in an efficient manner. abreast of these bow-ports, she has watertight iron-doors, in the foremost bulkhead, properly framed and secured, with hinges, screw bolts and nuts, bore up upon an India-rubber packing. The outside surfaces of these wood-ports, are sheathed with zinc.

She is fitted with a middle-line Intercostal steelson, formed of plates connected to the floors, vertically by angle-irons, a deep hull-plate is riveted to these intercostal-plates, standing above floors, between two rows of angle irons, all fore and aft, which are again connected to the double reverse-frames on top of floor-plates longitudinally.

In what manner are the surfaces preserved from oxidation? Inside Painted to upper part of bulges above which
Ditto ditto and Outside with three coats of shell of iron paint
with the addition of the zinc paint on bottom

I am V.A. opinion this Vessel should be Classed A. 1. +

The amount of the Fee £ 5 : 0 : 0 is received by me,

Special £ 42 : 11 : 0

+ Certificate (* required) £ - : - : -

J. Williams Esq.

Committee's Minute 2nd April 1869.

This iron built ship appears eligible for classification as recommended above.

Character assigned A. 1. +

Mr. J. Williams Esq.

Mr. J. Williams