

IRON SHIP. 16350 No. 4876

No. 6995 Survey held at Port Glasgow Date, First Survey 29th Decr 1875 Last Survey 5th June 1876

On the Ship "Agnes Oswald" Master Mitchell

TONNAGE under Tonnage Deck 13104.50 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, or Awning Deck. 70.05 SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Poop, or Raised Or. Dk. 21.43 HALF BREADTH (moulded) 18.41 6
 Ditto of Houses on Deck 41.20 DEPTH from upper part of Keel to top of Upper Deck Beams 24.2
 Ditto of Forecastle 1447.34 GIRTH of Half Midship Frame (as per Rule) 37.3
 Gross Tonnage 1380.22 1st NUMBER 79.916
 Less Crew Space 67.12 1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet]
 Less Engine Room 1380.22 LENGTH 232.75
 Register Tonnage as cut on Beam 1380.22 2nd NUMBER 18600
 PROPORTIONS—Breadths to Length 6.3
 Depths to Length—Upper Deck to Keel 9.6
 Main Deck ditto 9.6

Built at Port Glasgow
 When built 1875:76 Launched 12 May 1876
 By whom built Henry Munay & Co
 Owners David Law
 Port belonging to Glasgow
 Destined Voyage San Francisco
 If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH 232.75 Feet. Inches. BREADTH 36.03 Feet. Inches. DEPTH top of Floors to Upper Deck Beams 22.2 Feet. Inches. Power of Engines 3 Horse. No. of Decks with flat laid One No. of Tiers of Beams Libra

Dimensions of Ship per Register, length 243.5 breadth 37.2 depth, 22.

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2	9 x 2 1/2
STEM, moulding and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2
STERN-POST for Rudder do. do.	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2
for Propeller	24	24	24	24	24	24
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	24	24	24	24
FRAMES, Angle Iron, for 1/2 length amidships	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3
Do. for 1/2 at each end	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3
REVERSED FRAMES, Angle Iron	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3	5 x 3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	24	24	24	24	24	24
thickness at the ends of vessel	12	12	12	12	12	12
depth at 3/4 the half-bdth. as per Rule	40	40	40	40	40	40
height extended at the Bilges	40	40	40	40	40	40
BEAMS, Upper, Spar, or Awning Deck	9 x 9	9 x 9	9 x 9	9 x 9	9 x 9	9 x 9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Single or double Angle Iron on Upper edge	40	40	40	40	40	40
Average space	40	40	40	40	40	40
BEAMS, Main, or Middle Deck	9 x 9	9 x 9	9 x 9	9 x 9	9 x 9	9 x 9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Single or double Angle Iron on Upper Edge	40	40	40	40	40	40
Average space	40	40	40	40	40	40
BEAMS, Lower Deck, Hold, or Orlop	9 x 9	9 x 9	9 x 9	9 x 9	9 x 9	9 x 9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3	3 x 3
Single or double Angle Iron on Upper Edge	40	40	40	40	40	40
Average space	40	40	40	40	40	40
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	17 x 12	17 x 12	17 x 12	17 x 12	17 x 12	17 x 12
" Rider Plate	10 3/4 x 12	10 3/4 x 12	10 3/4 x 12	10 3/4 x 12	10 3/4 x 12	10 3/4 x 12
" Bulb Plate to Intercoastal Keelson	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" Double Angle Iron Side Keelson	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" Side Intercoastal Plate	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" do. Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" Attached to outside plating with angle iron	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
BILGE Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" do. Bulb Iron	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
" do. Intercoastal plates riveted to plating for length	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
BILGE STRINGER Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
Intercoastal plates riveted to plating for length	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4
SIDE STRINGER Angle Irons	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4

Flat Keel Plates, breadth and thickness 36 11 36 11
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied 3 11 3 11
 fm up. part of Bilge to l. edge of Sh'rstrake 10 10 10 10
 Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. 40 12 40 12
 Up. or Spar Dk Sh'rstrake, brdth & thickness 40 12 40 12
 Butt Straps to outside plating, breadth & thickness 11 10 11 10
 Lengths of Plating 6 11 6 11
 Shifts of Plating, and Stringers 2 11 2 11
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness 46 10 46 10
 Angle Iron on ditto 46 10 46 10
 Tie Plates fore and aft, outside Hatchways 13 10 13 10
 Diagonal Tie Plates on Beams No. of Pairs 4 4 4 4
 Planksheer material and scantling 4 4 4 4
 Waterways do. do. 4 4 4 4
 Flat of Upper Deck do. do. 4 4 4 4
 How fastened to Beams 4 4 4 4
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 46 10 46 10
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 2 4 4 4
 Tie Plates, outside Hatchways 13 10 13 10
 Diagonal Tie Plates on Beams, No. of pairs 4 4 4 4
 Waterways materials and scantlings 4 4 4 4
 Flat of Middle Deck do. do. 4 4 4 4
 How fastened to Beams 4 4 4 4
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 33 9 33 9
 Is the Stringer Plate attached to the outside plating? Yes
 Angle Irons on ditto, No. 2 4 4 4
 Stringer or Tie Plates, outside Hatchways 13 10 13 10
 Flat of Lower Deck do. do. 4 4 4 4
 Ceiling betwixt Decks, thickness and material 2 1/2 2 1/2 2 1/2 2 1/2
 in hold do. do. 2 1/2 2 1/2 2 1/2 2 1/2
 Main piece of Rudder, diameter at head 6 6 6 6
 do. at heel 3 3 3 3
 Can the Rudder be unshipped afloat? Yes
 Bulkheads No. one Thickness of 7/16
 Height up Main Deck
 How secured to sides of ship Double Frames
 Size of Vertical Angle Irons 3 1/2 x 3 1/4 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 Iron Patent Pall Bitt Iron

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 7 apart.
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Main Deck Stringer and to every frame 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 3/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 3/4 ins. from centre to centre.
 Butts of Three Strakes at Bilge for half length, treble riveted with Butt Straps 7/16 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 3/4 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 3/4 ins. from cr. to cr.
 Edges of Main Sheerstrake, double single riveted. Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.
 Butts of Main Stringer Plate, treble riveted for half 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 or double riveted? —
 Waterway, how secured to Beams Iron Gutter (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, 5 Crutches, 5
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best

Manufacturer's name or trade mark Angle & Bulb Iron & Plates Messrs
 The above is a correct description.
 Builder's Signature, Henry Munay & Co Surveyor's Signature, H. B. Bould
 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*

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*

163342 *Iron*

Masts, Bowsprit, Yards, &c., are *Iron* 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 Bowsprits. *Fore Mast 83' 6" dia 30 Main 86' 6" dia 31 Mizzen 80' 0" dia 28 1/2 Bowsprit 24' 9" dia 32*
Fore Mast Thickness 7/16 to 6/16 in 3 plates
Main Mast " 8/16 to 6/16 in 4 " "
Mizzen " 8/16 to 6/16 in 3 " "
Bowsprit " 8/16 to 6/16 in 3 " "
Edges double riveted Butt straps outside 1/16 thicker than plates and heels & double riveted plates doubled in way of wedging. Bowsprit fitted with diaphragm plate & angle Irons.

NUMBER for EQUIPMENT

No.	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	No.	Weight.	Test per Certificate	W'ght req'd per Rule.	Test req'd per Rule.
2	Fore Sails,	Chain	270	1 7/8	63 1/2	270	63 1/2	16/32	2	34.0.14	31.14.14	34.0.0	31.12.20
2	Fore Top Sails,	Lepton Paving House			13-18	107 1/2		7/4	1	35.6.4	31.16.1.0	20.3.17	27 1/2
2	Fore Topmast Stay Sails	Samuel Hegema Superintendent											
2	Main Sails,	Hamp Strm Cbl	90	1		10				14.0.0		13.2.0	
2	Main Top Sails,	Hawser ...	90	10 1/4		6		Stream	1	7.0.0		6.3.0	
	and other running rigging	Towlines ...	90	5 1/4				Kedges	1	3.2.0		3.1.0	
		Warp ...	90	5 1/4									

Standing and Running Rigging *Manilla* sufficient in size and *Good* in quality. She has *one* Long Boat and *3* others

The Windlass *Emerson Walker Patent* Capstan *3* and Rudder *Efficient* Pumps *2 Iron*

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? *Pots & Scuppers*

Cargo Hatchways. How formed? *Iron Cornings*

State size Main Hatch *12 x 10* Forehatch *8' x 5'* Quarterhatch *8' x 6'*

If of extraordinary size, state how framed and secured?

What arrangement for shifting beams? *one in main Hatch*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *766* Date *11th Oct 1875*

Order for Ordinary Survey No. *810* Date *11th Oct 1875*

No. *810* in builder's yard.

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

2nd. On the plating during the process of riveting

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

Built under S.S. and surveyed 1875 Dec 29 1876 Jan 7 7.12.19.21.25.29. Feb 1.17 March 3.7.13.16. April 15.22.27. May 4.10.22.25.29. June 1.5

General Remarks (State quality of workmanship, &c.) *This Vessel has been built in conformity with the Rules and Midship section herewith appended which was submitted and approved by the Committee in letter dated 2nd November 1875.*

The workmanship and materials are of good quality.

The main & Lower Yards 80 ft dia 20 in 2 plates 6/16 to 3/16 & ages single riveted, butts overlapped and heels riveted, plates doubled in way of slings &c.

36 ft 42 ft

State if one, two, or three, decked vessel, or if span, or running deck; 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 *Portland Cement to be rubbed in* Outside *Red Lead Paint & Patent Lead above Composition on bottom*

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

The amount of the Entry Fee ... £ *5: 0: 0* is received by me, *June 1876*

Special ... £ *59: 10: 0* Certificate ... £ *2: 0: 0*

(Travelling Expenses, if any, £ ...)

Committee's Minute *6th June 1876*

Character assigned *100A*

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