

IRON SHIP. 1848

No. 3009 Survey held at Aberdeen Date, First Survey Oct 20 1848 Last Survey May 30 1849
On the Elliot Barque Master W. A. Mackay

TONNAGE under Tonnage Deck } 1033.54
Ditto of Third, Spar, or Awning Deck }
Ditto of Poop, or Raised Or. Dk. } 56.64
Ditto of Houses on Deck } 15.53
Ditto of Forecastle } 41.54
Gross Tonnage } 1147.25
Less Crew Space } 58.12
Less Engine Room }
Register Tonnage } 1119.13
as cut on Beam }

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
HALF BREADTH (moulded) 14.4
DEPTH from upper part of Keel to top of Upper Deck Beam: 23.2
GIRTH of Half Midship Frame (as per Rule) .. . 35.5
1st NUMBER 46.1
1st NUMBER, if a THREE DECKED VESSEL [deduct 7 feet]
LENGTH 208.
2nd NUMBER 15828.
PROPORTIONS—Breadths to Length 5.9
Depths to Length—Upper Deck to Keel 2.9
Main Deck ditto

Built at Aberdeen
When built 1847 Launched 28 April 1847
By whom built James A. Mackay & Co.
Owners James Muir residing at Aberdeen
Port belonging to Aberdeen
Destined Voyage Calcutta
If Surveyed while Building, Afloat, or in Dry Dock. Under Special Survey

LENGTH on deck as per Rule .. 208. BREADTH—Moulded .. 15.1 DEPTH top of Floors to Upper Deck Beams .. 21.2 Do. do. Main Deck Beams .. 13.91
Power of Engines ... Horse. No. of Decks with flat laid. No. of Tiers of Beams

Dimensions of Ship per Register, length, 219 breadth, 35.1 depth, 21.

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2
STEM, moulding and thickness	8 1/2 x 2 1/2	8 x 2 1/2
STERN-POST for Rudder do. do.	8 1/4 x 2 1/2	8 1/2 x 2 1/2
for Propeller		23
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	
FRAMES, Angle Iron, for 3/4 length amidships	5 3/4 x 3/8	5 3/4 x 3/8
Do. for 1/2 at each end	5 3/4 x 3/8	5 3/4 x 3/8
REVERSED FRAMES, Angle Iron	5 1/2 x 3/8	5 1/2 x 3/8
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	2 1/4 x 9/16	2 1/4 x 9/16
thickness at the ends of vessel	1 1/2 x 9/16	1 1/2 x 9/16
depth at 3/4 the half-bdth. as per Rule	12 1/2 x 9/16	12 1/2 x 9/16
height extended at the Bilges	5 1/4 x 9/16	4 8 inches
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 x 9/16	8 x 9/16
Single or double Angle Iron on Upper edge	3 1/4 x 3/8	3 1/4 x 3/8
Average space	3.10	3.10
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 1/2 x 9/16	8 1/2 x 9/16
Single or double Angle Iron on Upper Edge	3 1/4 x 3/8	3 1/4 x 3/8
Average space	3.10	3.10
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	8 1/2 x 9/16	8 1/2 x 9/16
Single or double Angle Iron on Upper Edge	3 1/4 x 3/8	3 1/4 x 3/8
Average space	3.10	3.10
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	15 1/4 x 12/16	15 x 12/16
" Rider Plate	10 1/4 x 12/16	10 1/4 x 12/16
" Bulb Plate to Intercoastal Keelson	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" Angle Irons	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" Double Angle Iron Side Keelson	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" Side Intercoastal Plate for 112 feet	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" do. Angle Irons	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" Attached to outside plating with angle iron	5 1/2 x 3 x 9/16	5 1/2 x 3 x 9/16
BILGE Angle Irons	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" do. Bulb Iron	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
" do. Intercoastal plates riveted to plating for length	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
BILGE STRINGER Angle Irons	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
Intercoastal plates riveted to plating for length	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16
SIDE STRINGER Angle Irons	5 x 3 1/2 x 9/16	5 x 3 1/2 x 9/16

Transoms, material. Knight-heads. Hawse Timbers. Plates and frames
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 5 apart.
The REVERSED ANGLE IRONS on floors and frames extend inwards middle line from keel to gunwale and to fore and aft 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 1/4 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 1 1/8 in. diameter, averaging 5 1/4 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1 1/8 in. diameter averaging 5 1/4 ins. from centre to centre.
Butts of three Strakes at Bilge for half length, treble riveted with Butt Straps 1 1/8 thicker than the plates they connect.
Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 1 1/8 in. diameter, averaging 5 1/4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 1 1/8 in. diameter, averaging 5 1/4 ins. from cr. to cr.
Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted. to Bulwarks
Butts of Main Sheerstrake, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted half length amidships.
Butts of Main Stringer Plate, treble riveted for length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for half length.
Breadth of laps of plating in double riveting 5 1/2 Breadth of laps of plating in single riveting 5 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and treble riveted
Waterway, how secured to Beams Gunwale Waterway (Explain by Sketch, if necessary.)
Beams of the various Decks, how secured to the sides? Welded seams riveted to the frames No. of Breasthooks, four Crutches, four
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? James Muir, James & Bullock
Manufacturer's name or trade mark, Hopkins & Co. of Glasgow, Brown & Shanks Brown.

The above is a correct description.
Builder's Signature, A. H. Hall Surveyor's Signature, J. H. Little
Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 472-0082

Workmanship. Are the butts of plating planed or otherwise fitted? *All 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 in Corners of Butts*

Masts, Bowsprit, Yards, &c., are *Iron & Steel* 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. *The Masts fore and Main are formed of 3 plates 5/16 thick with 3 angle bars 5 1/2 x 3 1/2 x 1/8 whole length of Mast. Lands double clincher butt shape fitted outside 1/16 thicker than plates and double riveted. fore length of about 30 feet remainder double riveted by J. J. Davis 17 April 1877 at New York. Masts at New York by J. J. Davis April 17 1877*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test per Rule.
N ^o .	SAILS.	CABLES, &c.					Bowers					
1	Fore Sails,	Chain	240	1 1/4	55.2.2.0	240		3	30.7.24	29 tons	30.0.0	28
2	Fore Top Sails,				44.2.2.0	1 1/4			29.3.0	28.8.3.0	30.0.0	28
3	Fore Topmast Stay Sails								26.0.24	25.16.1.0	25.2.0	25
4	Main Sails,	Hmpn Strm Cbl	80	1		10			5.2.10			
5	Main Top Sails,	Hawser ...	90	10		9	Stream	1	12.0.13		12.0.0	
		Towlines ...	90	9		5 1/2	Kedges	2	5.0.8		5.0.0	
		Warp ...	90	5 1/2					3.1.0		3.0.0	
		quality good										

Standing and Running Rigging *Good* sufficient in size and *good* in quality. She has *one 24 ft Long Boat and 2.24 ft life boat*
The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *5 of them 2 1/2 in Wallace Patent*

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? *Three discharge ports and three scuppers on each side*

Cargo Hatchways.—How formed? *Iron Camings riveted to beams and tie plates*

State size Main Hatch *15.5 x 10.0* Forehatch *5.0 x 5.0* Quarterhatch *5.0 x 5.0*

If of extraordinary size, state how framed and secured? *Medium size*

What arrangement for shifting beams? *One Beam in Main Hatch at both decks*

Hatches, If strong and efficient? *Yes. Solid hatches*

Order for Special Survey No. <i>407</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	<i>Built under special survey and surveyed as follows</i>
Date <i>18 Sept 1875</i>		2nd. On the plating during the process of riveting	<i>20.23.25.28 Nov 10/14 15.14/16.22.24.27.29 Dec 1.4.5.8.12.13.15.16.20.22.23.</i>
Order for Ordinary Survey No. <i>—</i>		3rd. When the beams were in and fastened, and before the decks were laid...	<i>29.1875 Jan 5.11.12.13.14.20.24.25.26.29.30.31 Feb 3.5.8.10.12.14.15.16.19.20.</i>
Date <i>—</i>		4th. When the ship was complete, and before the plating was finally coated or cemented...	<i>March 1.2.6.8.9.10.16.17.21.22.24.28.29.31 April 2.3.5.7.11.12.14.15.19.21.</i>
No. <i>292</i> in builder's yard.		5th. After the ship was launched and equipped.	<i>28 May 5.10.12.15.17.19.26.30 1877</i>

General Remarks (State quality of workmanship, &c.) *Workmanship Good*

riveted. Length of fore Mast 88 feet ditto of Main Mast 88 feet. Dia at Deck 30 1/2 in Keel 27 1/2 in. rounds 22 1/2. The Mizzen Mast is formed of 3 plates 5/16 thick. Lands double riveted butts double and treble riveted butt shape 1/16 thicker than plates, and is built in accordance with Secord's letter dated 25 January 1874.

The bowsprit is formed of 4 plates 1/16 thick. Lands double clincher butt shape 1/16 thicker than plates fitted outside Mast bowsprit and treble riveted. Bowsprit plate 9.5 x 1/16 Angle bars 5 1/2 x 3 1/2 x 1/8, and doubled at its end with plate 9.5 x 1/16. Dia at Bed 29 1/2 x 20 1/2, at Keel 25 1/2 x 22 1/2, at Cap 21 1/2 x 18 1/2. Length outside bed 22 feet.

Fore and Main lower yards are formed of 2 plates 1/4 x 5/16 thick. Lands single clincher butt shape 1/16 thicker than plates and treble riveted. Length 44 feet Dia at clew 19 in Ends 9 1/2.

Fore and Main lower topsail yards formed of 2 plates 3/4 x 5/16 thick. Lands single clincher butt shape 1/16 thicker than plates and treble riveted. Length 64 feet Dia at clew 15 in Ends 8 1/2 and all yards double wake of slings. The iron used in this vessel as well as rivets has been carefully tested and found to be of good quality. Length of Poop 43 feet, ditto of fore-castle 33 feet. And built in accordance with approved plans, as per Secord's letter dated November 2nd 1875.

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom

How are the surfaces preserved from oxidation? Inside *and Portland Cement in flat* Outside *Tarred Paint*

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, *J. M. Little*

Special ... £ 52 : 19 : 0 *May 30 1877*

Certificate ... *Grates*

(Travelling Expenses, if any, £ *none*.)

Committee's Minute *1st June 1877*

Character assigned *100 A 1*