

IRON SHIP.

(Received at London Office, THURSDAY 28 OCT 1886)

No. 19768 Survey held at Newcastle

Date, First Survey 5th October 1886Last Survey 8th October 1886

On the Screw Steamer Ardgar

TONNAGE under } 1545.95
Tonnage Deck }
Ditto of Third, Spar, }
or Awning Deck. }
Ditto of Poop, or }
Raised Or. Dk. }
Ditto of Houses }
on Deck }
Ditto of Forecastle }
Gross Tonnage } 1656.59
Less Cargo Space }
Less Engine Room }
Register Tonnage }
as cut on Beam } 1076.95

ONE, OR TWO-DECKED, THREE-DECKED VESSEL,
SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) ... 16.9
Depth from upper part of Keel to top of Upper Deck Beams ... 25.625
Girth of Half Midship Frame (as per Rule) ... 31.0
1st Number ... 66.525
1st Number, if a 3-Decked Vessel .. deduct 7 feet
Length ... 247.67
2nd Number ... 16476.2
Proportions— Breadths to Length ... 7.3
Depths to Length— Upper Deck to Keel. Spar ... 9.6
Main Deck ditto ... 13.3

Master Alexander Cook
Built at Low Walker
When built 1886 Launched 30th August
By whom built William Dobson & Co
Owners Adam Bros
Residence Aberdeen
Port belonging to Aberdeen
Destined Voyage
If Surveyed while Building & Afloat, or in Dry Dock.

LENGTH on deck as per Rule ... 247 8 BREADTH— Moulded ... 33 10 DEPTH top of Floors to Upper Deck Beams ... 25 11 1/2 Do. do. Main Deck Beams ... 18 11 1/2 Power of Engines ... 140 Horse. N^o. of Decks with flat laid ... 1 No. of Tiers of Beams ... 3

Dimensions of Ship per Register, length, 249.8 breadth, 34.0 depth, 23.8 Moulded depth 14.10 1/2

| KEEL, depth and thickness | Inches in Ship. | Inches per Rule. | PLATES in Garboard Strakes, br'dth & thickness | Inches in Ship. | 16ths. in Ship. | Inches. per Rule. | 16ths. per Rule |
|--|-----------------|------------------|--|--|-----------------|-------------------|-----------------|
| EM, moulding and thickness... | 8 1/2 x 2 1/2 | 8 1/2 x 2 1/2 | From Garboard to upper part of Bilges... | 15 1/2 x 1 1/2 | 15 1/2 | 15 1/2 x 1 1/2 | 15 1/2 |
| RN-POST for Rudder do. do. | 8 x 6 | 8 x 6 | Of d'bling at Bilge, or increased thickness, and length applied | for 1/2 length | | | |
| " " for Propeller | 8 x 5 | 8 x 5 | From up. prt of Bilge to l. edge of Sh'rstrake... | 11 1/2 x 1 1/2 | 11 1/2 | 11 1/2 x 1 1/2 | 11 1/2 |
| Distance of Frames from moulding edge to moulding edge, all fore and aft | 23 | 23 | Main Sheerstrake, breadth and thickness... | 36 | 36 | 36 x 3/2 | 36 |
| FRAMES, Angle Iron, for 1/2 length amidships | 4 3/4 x 3/4 | 4 3/4 x 3/4 | Of d'bling at Sh'stk. & lng. applied | | | | |
| Do. for 1/2 at each end | 4 3/4 x 3/4 | 4 3/4 x 3/4 | From M'n. to Up. or Spar Dk. Sh'rstrake... | 12 1/2 x 1 1/2 | 12 1/2 | 12 1/2 x 1 1/2 | 12 1/2 |
| REVERSED FRAMES, Angle Iron | 3 3/4 x 3/4 | 3 3/4 x 3/4 | Up. or Spar Dk Sh'rstrake, br'dth & thicken'ss... | 36 x 3/4 | 36 | 36 x 3/4 | 36 |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships | 20 x 7/16 | 20 x 7/16 | Butt Straps to outside plating, breadth & thickness | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| " thickness at the ends of vessel | 20 x 7/16 | 20 x 7/16 | Lengths of Plating | 7 1/2 | 7 1/2 | 7 1/2 | 7 1/2 |
| " depth at 3/4 the half-bdth. as per Rule | 15 | 15 | Shifts of Plating, and Stringers | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 |
| " height extended at the Bilges... | 14 1/2 | 14 1/2 | Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... | 8 1/2 | 8 1/2 | 8 1/2 | 8 1/2 |
| BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron | 6 1/2 x 3/4 | 6 1/2 x 3/4 | Angle Iron on ditto | 4 x 4 x 3/4 | 4 x 4 x 3/4 | 4 x 4 x 3/4 | 4 x 4 x 3/4 |
| Single or double Angle Iron on Upper edge | 3 x 3/4 | 3 x 3/4 | Tie Plates fore and aft, outside Hatchways | 12 x 1 1/2 | 12 x 1 1/2 | 12 x 1 1/2 | 12 x 1 1/2 |
| Average space... | 46 | 46 | Diagonal Tie Plates on Beams No. of Pairs | | | | |
| BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron | 6 1/2 x 3/4 | 6 1/2 x 3/4 | Flat of Up. Spar, or Awning Dk.* | Pair 3 1/2 | Pair 3 1/2 | Pair 3 1/2 | Pair 3 1/2 |
| Single or double Angle Iron on Upper Edge | 4 x 3 1/2 | 4 x 3 1/2 | How fastened to Beams | Butt 9 | Butt 9 | Butt 9 | Butt 9 |
| Average space... | 23 | 23 | Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness | 35 1/2 x 3/4 | 35 1/2 x 3/4 | 35 1/2 x 3/4 | 35 1/2 x 3/4 |
| BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron | 9 x 3/4 | 9 x 3/4 | Is the Stringer Plate attached to the outside plating? | Yes | | | |
| Single or double Angle Iron on Upper Edge | 4 x 3 1/2 | 4 x 3 1/2 | Angle Irons on ditto, No. | 4 x 4 x 3/4 | 4 x 4 x 3/4 | 4 x 4 x 3/4 | 4 x 4 x 3/4 |
| Average space... | 16 | 16 | Tie Plates, outside Hatchways | | | | |
| BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron | 16 x 3/4 | 16 x 3/4 | Diagonal Tie Plates on Beams, No. of pairs | | | | |
| Single or double Angle Iron on Upper Edge | 4 x 3 1/2 | 4 x 3 1/2 | Flat of Middle Deck* do. | Pair 4 1/2 | Pair 4 1/2 | Pair 4 1/2 | Pair 4 1/2 |
| Average space... | 16 | 16 | How fastened to Beams | Butt 9 | Butt 9 | Butt 9 | Butt 9 |
| KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates | 16 x 3/4 | 16 x 3/4 | Stringer Plates on ends of Lower Deck, Hold or Orlop Beams | 31 x 1 1/2 | 31 x 1 1/2 | 31 x 1 1/2 | 31 x 1 1/2 |
| " Rider Plate | 10 3/4 | 10 3/4 | Is the Stringer Plate attached to the outside plating? | Yes | | | |
| " Bulb Plate to Intercoastal Keelson | 5 3/2 | 5 3/2 | Angle Irons on ditto, No. | 4 x 4 x 3/4 | 4 x 4 x 3/4 | 4 x 4 x 3/4 | 4 x 4 x 3/4 |
| " Angle Irons | 5 3/2 | 5 3/2 | Stringer or Tie Plates, outside Hatchways | | | | |
| " Double Angle Iron Side Keelson | 5 3/2 | 5 3/2 | Flat of Lower Deck* | | | | |
| " Side Intercoastal Plate | 5 3/2 | 5 3/2 | Ceiling betwixt Decks, thickness and material | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/2 |
| " do. Angle Irons | 5 3/2 | 5 3/2 | " in hold do. do. | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 |
| " Attached to outside plating with angle iron | 3 | 3 | Main piece of Rudder, diameter at head | 5 3/4 | 5 3/4 | 5 3/4 | 5 3/4 |
| WEDGE Angle Irons | 5 3/2 | 5 3/2 | do. at heel | 3 | 3 | 3 | 3 |
| " do. Bulb Iron | 8 | 8 | Can the Rudder be unshipped afloat? | Yes | | | |
| " do. Intercoastal plates riveted to plating for length | 5 3/2 | 5 3/2 | Bulkheads No. 5 No. per Rule 4 | | | | |
| WEDGE STRINGER Angle Irons | 5 3/2 | 5 3/2 | " Thickness of | 6 1/2 | 6 1/2 | 6 1/2 | 6 1/2 |
| WEDGE STRINGER Angle Irons | 5 3/2 | 5 3/2 | " Height up | Main & Spar Deck | | | |
| WEDGE STRINGER Angle Irons | 5 3/2 | 5 3/2 | " How secured to sides of ship | between double frames | | | |
| WEDGE STRINGER Angle Irons | 5 3/2 | 5 3/2 | " Size of Vertical Angle Irons | 4 x 3 x 3/4 and distance apart 24 ins. | | | |
| WEDGE STRINGER Angle Irons | 5 3/2 | 5 3/2 | " Are the outside Plates doubled two spaces of Frames in length? | Yes | | | |

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 Spar deck 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 1/2 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 3/4 in. diameter, averaging 3 3/4 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 x 7/8 in. diameter averaging 3 3/2 ins. from centre to centre.

Butts of Three Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/4 thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 3/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 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 4 1/2 x 5 1/2 Breadth of laps of plating in single riveting 4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? No. of Breasthooks, 4 Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best Best Crown

Manufacturer's name or trade mark, James & Co. Bolton & Co. Plate from Consell Iron Co.

The above is a correct description.

Builder's Signature, William Dobson & Co. Surveyor's Signature, William L. Sharpe

Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? Yes
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 aft

Masts, Bowsprit, Yards, &c., are of 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 Bowsprit Foremast 73.0 x 22 inches
Main mast 66.0 x 20 " Plating 7/8" plates double and butts bolted riveted
head made with two plates no angle

| NUMBER & LETTER for EQUIPMENT 20425.9 | | SAILS. | | CABLES, &c. | | Fathoms | Inches. | Test per Certificate. | Inches per Rule. | Machine where Tested and Superintendent, also Number of Certificate. | ANCHORS. | N ^o . | Weight. Ex. Stock. | Test per Certificate. | W'ght req'd per Rule. | Machine where Tested and Superintendent, also Number of Certificate. |
|---------------------------------------|--------------------------|--------|--|-------------------|-------|---------|---------|-----------------------|------------------|--|--|------------------|--------------------|-----------------------|-----------------------|--|
| N ^o . | | | | Chain | | 270 | 8 1/2 | 71 3/4 | 1 1/8 | | Bower Anchors | 1 | 28.1.0 | 27.6.1.0 | | 14 th August 1882 |
| / | Fore Sails, | | | Iron Stream Chain | | 75 | 1 1/2 | 30 3/5 | 1 1/2 | L. P. H. Low Walker 18 th Sept 1882 | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) | 1 | 28.0.0 | 27.2.0.0 | 67 | L. P. H. Low Walker 11 th Decr 1882 |
| / | Fore Top Sails, | | | or Steel Wire | | 90 | 3 1/2 | Tested per rule | | | | 1 | 23.2.21 | 23.13.3.0 | | |
| / | Fore Topmast Stay Sails, | | | or Hempen Strm | | 90 | 9 | 90 | 9 | | | | | | | |
| / | Main Sails, | | | Cable | | 90 | 7 | 90 | 7 | | Stream Anchor | 1 | 8.3.21 | 11.2.2.0 | 8 1/2 | L. P. H. Low Walker 26 th Aug 1882 |
| / | Main Top Sails, and | | | Towline, Hemp. | | 180 | 5 | | | | Kedge | 1 | 4.2.7 | 7.0.0.0 | 4 1/2 | R. Burdett Sept |
| | | | | or Steel Wire | | 90 | 4 | | | | 2nd Kedge | 1 | 2.1.0 | 4.5.0.0 | 2 1/2 | |
| | | | | Hawser | | | | | | | | | | | | |
| | | | | Warp | | | | | | | | | | | | |
| | | | | quality | Good | | | | | | | | | | | |

Standing and Running Rigging Galva wire sufficient in size and good in quality. She has Two life Long Boat and 1 Cutter & 1 Pig
The Windlass is Clark Chapman Capstan None and Rudder Good Pumps Good

Engine Room Skylights. How constructed? of Oak on Bridge Deck How secured in ordinary weather? bolted to casing
What arrangements for deadlights in bad weather? Solid shutters with Bull eyes

Coal Bunker Openings. How constructed? Chest Iron How are lids secured? Hatch bars Height above deck? 18 inches

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? Scuppers & Firing ports

Cargo Hatchways. How formed? of Plate and angle iron
State size Main Hatch 23.0 x 12.0 Forehatch 11.6 x 12.0 Quarterhatch 19.0 x 12.0

If of extraordinary size, state how framed and secured? ✓

What arrangement for shifting beams? Two plate beams in main hatch with angles on top & bottom edges, & one in after hatch

Hatches, If strong and efficient? Yes

Order for Special Survey No. 1021 1885 Oct 5. 6. 8. 12. 19. 23. 28. 30. Nov. 3. 5. 6. 11. 16. 18. 19.
Date 16th 19th May 1885
Order for Ordinary Survey No. ✓
Date ✓
No. 9 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 24. Dec. 3. 16. 19. 22. 23. 29. Jan. 5. 6. 12. 14. Feb. 10.
2nd. On the plating during the process of riveting 23. June 2. 6. 22. 24. 28. July 8. 12. 14. 19. 22. 26.
3rd. When the beams were in and fastened, and before the decks were laid.... 30. Aug 3. 6. 10. 11. 16. 18. 23. 25. 26. 28. 30. Sept.
4th. When the ship was complete, and before the plating was finally coated or cemented.. 6. 14. 16. 21. 23. 30 Oct 6. 8
5th. After the ship was launched and equipped

State dates of letters respecting this case Secretary letter 7th May 1885

General Remarks (State quality of workmanship, &c.) This Vessel has been built in accordance with the requirements of the Rules and approved tracings attached hereto.

The water ballast tanks fitted in Main and after Holds have been tested by a head of water not less than the load line of the vessel and found satisfactory. The fore part of after tank is divided by a centre line bulk-head as shown on pumping tracing.

The workmanship and materials are good throughout

The Freeboard as set forth in the Committee's letter of the 7th October 1886 has been marked on the sides of the vessel and verified

Winter 6 feet 1 inch

Summer 5 " 10 "

Fresh water above centre of disc 4 1/2 inches

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecabin, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside Paint & Cement Outside Paint

I am of opinion this Vessel should be Classed 100 A 1 Spar deck

The amount of the Entry Fee£ 4 : - : - is received by me, W. L. Sharpe

Special£ 65 : 3 : 6 14 Oct 1885

(to be sent as per margin). Certificate gratis : - : -

Committee's Minute FRIDAY 29 OCT 1885

Character assigned 100 A 1

L. A. T. C. P.

2 D.R. (12 rivs)

3 D.R.

new freeboard

The Freeboard as set forth in the Committee's letter of the 7th October 1886 has been marked on the sides of the vessel and verified

28/10/86