

IRON OR STEEL SHIP.

(Received at London Office, ...)

33

No. 33 Survey held at Stockton Date of writing Report 10th April 1890. Port of Middlesbrough. WED 16 APRIL 1890
On the Steel Screw Steamer "Avala" Date, First Survey 2nd Oct 1889 Last Survey 10th April 1890

TONNAGE under
Age Deck 3534.47
Do. Green Tonnage Dk.
Do. 3rd, 4th, Spar or
Awning Dk.
Total under Upper Dk.

Do. of Poop 50.45
Do. of Raised Qr.
Dk. or Break
Do. of Bridge House
Do. of Houses on Deck 117.09
Do. of excess of Hatchways 17.02
Do. of Forecastle 24.48
Gross Tonnage 3743.57
Less Crew Space 130.25
3613.32
Less Engine Room 1197.92
Register Tonnage 2415.34
as cut on Beam

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

Half Breadth (moulded) Feet. 21.02
Depth from upper part of Keel to top of Upper Deck Beams 31.17
Girth of Half Midship Frame (as per Rule) 46.79
1st Number 98.98
1st Number, if a 3-Decked Vessel .. deduct 7 feet 7.00
Length 91.98
2nd Number 368.17
338.67
Proportions— Breadths to Length 8.7
Depths to Length—Upper Deck to Keel 11.8
Main Deck ditto 15.8

Rig Schooner Two Masts
Master F. Newell
Year of appointment (1) As master in service of owner of present vessel, — 18
(2) As master of this vessel 1890
Built at Stockton
When built 1890 Launched 20th Feb 7-90
By whom built Ropner & Son
Owners J. M. Wood
Managers " "
(If desired to be entered in Reg. Book.)
Residence
Port belonging to Liverpool
Destined Voyage Bombay
If Surveyed while Building Afloat or in Dry Dock.
While building and afloat.

LENGTH on deck as per Rule ... Feet. 368 Inches. 2 BREADTH—Moulded... Feet. 42 Inches. 05 DEPTH top of Floors to Upper Deck Beams ... Feet. 27 Inches. 6 Do. do. Main Deck Beams ...
Dimensions of Ship per Register, length, 370 breadth, 42.2 depth, 27.3 Moulded depth 30.32

KEEL , depth and thickness	11	1 1/4	11	1 1/4
STEM , moulding and thickness... ..	11	3	11	3
STERN-POST for Rudder do. do.	11	7	11	7
" " for Propeller	11	7	11	7
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	24	24
FRAMES , Angle Iron, for 3/4 length amidships	5 1/2	3 1/2	8	5 1/2
Do. for 1/4 at each end	5 1/2	3 1/2	7	5 1/2
REVERSED FRAMES , Angle Iron STEEL	3 1/2	3 1/2	8	3 1/2
FLOORS , depth and thickness of Floor Plate	44	iron	7 1/2	44
" mid line for half length amidships	44	iron	7 1/2	44
" thickness at the ends of vessel	44	iron	7 1/2	44
" depth at 3/4 the half-bdth. as per Rule	44	iron	7 1/2	44
" height extended at the Bilges... ..	44	iron	7 1/2	44
BEAMS , Upper, Spar, or Awning Deck	9	9	9	9
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	3 1/2	3 1/2	7	3 1/2
Single or double Angle Iron on Upper edge	3 1/2	3 1/2	7	3 1/2
Average space... ..	48	48	48	48
BEAMS , Main, or Middle Deck	10	10	10	10
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	10	10	10	10
Single or double Angle Iron on Upper Edge	10	10	10	10
Average space... ..	48	48	48	48
BEAMS , Lower Deck	11	11	11	11
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	11	11	11	11
Single or double Angle Iron on Upper Edge	11	11	11	11
Average space... ..	48	48	48	48
BEAMS , Hold, or Orlop	5	5	5	5
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5	5	5	5
Single or double Angle Iron on Upper Edge	5	5	5	5
Average space... ..	48	48	48	48
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	44	above	10	44
" Rider Plate Centre plate D.B.	42	10	42	10
" Bulb Plate to Intercoastal Keelson	4	4	4	4
" Angle Irons	4	4	4	4
" Double Angle Iron Side Keelson	4	4	4	4
" Side Intercoastal Plate	4	4	4	4
" do. Angle Irons	3 1/2	3 1/2	5 1/2	3 1/2
" Attached to outside plating with angle iron	3 1/2	3 1/2	5 1/2	3 1/2
BILGE Angle Irons	4	4	4	4
do. Bulb Iron... ..	4	4	4	4
do. Intercoastal plates riveted to plating for length	4	4	4	4
STRINGER Angle Irons	6 1/2	4 1/2	9	6 1/2
Intercoastal plates riveted to plating for length	6 1/2	4 1/2	9	6 1/2
SIDE STRINGER Angle Irons	6 1/2	4 1/2	9	6 1/2

Flat Keel Plates, breadth and thickness	✓			
PLATES in Garboard Strakes, br'dth & thickness	36	13	36	13
" From Garboard to upper part of Bilges... ..	11 and 12	12	11 and 12	12
" Of d'bling at Bilge, or increased thickness, and length applied	12	12	12	12
" From up. prt of Bilge to l.r. edge of Sh'rstrake... ..	12	12	12	12
" Main Sheerstrake, breadth and thickness.....	36	12	36	12
" Of d'bling at Sh'stk. & lng. applied	12	12	12	12
" From M'n. to Up. or Spar Dk. Sh'rstrake... ..	40	13	40	13
" Up. or Spar Dk Sh'rstrake, brdth & thicken'ss... ..	19	16 3/4	14 1/2	11 1/2
Butt Straps to outside plating, breadth & thickness	14	16	14	12
Lengths of Plating	14	16	14	12
Shifts of Plating, and Stringers	54	10	54	10
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... ..	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Angle Iron on ditto	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Tie Plates fore and aft, outside Hatchways	Complete Iron Deck 3/4	increased in thickness at openings	54	9
Diagonal Tie Plates on Beams No. of Pairs	54	9	54	9
Flat of Up., Spar, or Awning Dk.*	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
How fastened to Beams	Complete Steel Deck 3/4	increased in thickness at openings	46	9
Stringer Plate on ends of Main or Middle Deck	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Beams, breadth and thickness	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Is the Stringer Plate attached to the outside plating?	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Angle Irons on ditto, No.	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Tie Plates, outside Hatchways	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Diagonal Tie Plates on Beams, No. of pairs	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Flat of Middle Deck* do. do.	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
How fastened to Beams	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Is the Stringer Plate attached to the outside plating?	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Angle Irons on ditto, No.	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Stringer or Tie Plates, outside Hatchways	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Flat of Lower Deck*	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Ceiling betwixt Decks, thickness and material	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
" in hold do. do.	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Main piece of Rudder, diameter at head	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
do. at heel	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Can the Rudder be unshipped afloat?	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
Bulkheads No.	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
" Thickness of	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
" Height up	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
" How secured to sides of ship	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
" Size of Vertical Angle Irons	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9
" Are the outside Plates	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9	4 x 4 x 9

State clearly where plating is of alternate thicknesses as distinguished from diminished thickness at ends of vessel.

* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

The FRAMES extend in one length from Forecastle to T.S. and from T.S. to Upper Deck Riveted through plates with 7/8 in. Rivets, about 5 $\frac{1}{2}$ apart.
The REVERSED ANGLE IRONS on floors and frames extend from middle line to Forecastle and T.S. to Main St. and to Upper 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 $\frac{1}{2}$ in. diameter, averaging 6 $\frac{1}{2}$ 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 $\frac{1}{2}$ ins. from centre to centre.
" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 $\frac{1}{2}$ ins. from centre to centre.
" Butts of All Strakes at Bilge for whole length, treble riveted with Butt Straps 4/20 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 $\frac{1}{2}$ ins. from cr. to cr.
" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 $\frac{1}{2}$ 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 whole length amidships. Butts of Upper or Spar Sheerstrake, treble riveted whole length amidships.
" Butts of Main Stringer Plate, treble riveted for 2/3 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for whole length.
" Breadth of laps of plating in double riveting 5 $\frac{1}{2}$ Breadth of laps of plating in single riveting 5 $\frac{1}{2}$
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? 3 $\frac{1}{2}$ in. & 4 $\frac{1}{2}$ in. No. of Breasthooks, 4, No. Decks, 3, Crutches, 2
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good Malleable quality. Cast 6 $\frac{1}{2}$,"
Manufacturer's name or trade mark, Iron 6 $\frac{1}{2}$, Dorman Long 6 $\frac{1}{2}$ & the Steel 6 $\frac{1}{2}$ good brand.
The above is a correct description.
Builder's Signature, Ropner & Son Surveyor's Signature, Allison B. Wilson Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1 for Iron or Steel Ships—200—6/12/88—Transfer

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

to plate, &c., conform well to each other? Yes

from the faying surfaces? Yes

Do the holes for riveting plate to frames, butt strap or plate Yes

Are the rivet holes well and sufficiently countersunk in the plate and Yes

Do any rivets break into or through the seams or butts of the plating? A few through butts

Masts, Bowsprit, Yards, &c., are of Iron in Good condition, and sufficient in size and length. If of Iron or Steel give scantlings and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit These masts have been constructed in accordance with the tracing approved by the Committee (Secretary letter 22nd Oct. 89) and the iron which was manufactured by the West-Donthpool S.S.C. has satisfactorily withstood the tests prescribed by the Rules.

Number for Equip- ment 38449		CABLES, &c.		Inches.	Test per Certificate. Tons.	Fathoms & Inches per Rule.	Machine where Tested and Superintendent, also Name of Chain Maker.	ANCHORS.		Weight. Ex. Stock.	Test per Certificate	Wt. req'd per Rule.	Machine where Tested and Superintendent, also Name of Anchor Maker.
Letter for do. <u>W</u>		Number of Certificate.	Fathoms.					Number of Certificate (State if any and which Anchors are Stockless.)					
N.	SAILS.												
	Fore Sails,												
	Fore Top Sails,												
	Fore Topmast Stay Sails,												
	Main Sails,												
	Main Top Sails, and quality												
	Iron Stream Chain or Steel Wire ..	8219	300	2 1/4	107 3/4	300 2 1/4		12218	40.2.24	36.6.1.0	40.0.0		
	Hempen Str'm Cable							12219	40.2.17	36.6.1.0	40.0.0		
	TOWLINE— Hemp or Steel Wire	8237						12220	34.0.0	31.12.2.0	34.0.0		
	Hawser							Collective Weights	115.1.13		114.0.0		
	Warp							Stream	12.0.7	13.19.2.21	12.0.0		
								Kedge	6.0.0	8.5.0.0	6.0.8		
								2nd Kedge	3.1.21	5.18.3.0	3.0.0		

Standing and Running Rigging Wire, Hemp-Manilla sufficient in size and Good in quality. She has 3 Long Boats and 2 others.

The Windlass is Iron Good Capstan ✓ and Rudder Good Pumps Good

Engine Room Skylights.—How constructed? of Iron and Teak How secured in ordinary weather? Bolted to iron casing.

What arrangements for deadlights in bad weather? Bulwarks and Deadlights.

Coal Bunker Openings.—How constructed? Plates & Angles How are lids secured? Battered down Height above deck? 18"

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? Nine scuppers. Two firing ports

Cargo Hatchways.—How formed? Plates and Angles.

Hatches, If strong and efficient? 3" solid.

State size Main Hatch 24-0 + 12-0 Forehatch 16-0 + 12-0 Quarterhatches two 24-0 + 12-0.

If of extraordinary size, state
how framed and secured....

What arrangement for shifting beams? As per Rules

Order for Special Survey No. 1343

Date 28th March 89

Order for Ordinary Survey No. ✓

Date ✓

No. 244 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 Special Survey.

Date of First Survey 2nd Oct. 1889.

Last 10th April 1890. Total No. of Visits 4

State dates of letters respecting this case 13th July 4th Sept. 9th, 18th, 22nd March, 22nd Oct., 29th Nov., 4th Dec. 1889

General Remarks (State quality of workmanship, &c.) This vessel which is a sister ship to the S.S. Ataka by the same Builders, has been constructed in accordance with Rules and the tracings submitted to, and approved by the Committee. The whole of the material used in the hull is of good malleable quality. The punching, countersinking and riveting have been well executed, and the cement which is Portland, well laid and firmly adhering to the several surfaces

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

Particulars for Record in R.B.—Length of Poop 28 ft., R.Q.D. ✓ ft., Bridge Dk. 98 ft., F'castle 40.6 ft.; No. of Dks. (excluding spar, awn., &c.) ✓

Material of dks. Iron If spar, awn. dk., &c. ✓ Material of spar, awn. dk., &c. ✓; No. of tiers of beams (with and without dks. laid) ✓

Official No. 97767; Signal Letters LQSD

If double bottom, state particulars on separate form.

I am of opinion this Vessel should be Classed 100 A1 Steel

The amount of the Entry Fee£ 5: is received by me, R.H.G.

Special£ 115: 15: 6 14. 4 1890

(to be sent as per margin). Certificate ...

(Travelling Expenses, if any, £ ...)

Committee's Minute

Character assigned

FRIDAY 18 APRIL 1890

100 A1 Steel

2 dks Iron & 1 dks Steel B

Allison B. Wilson Davidson
Surveyor to Lloyd's Register of British and Foreign Shipping.

It is submitted that this vessel appears eligible to be Classed 100 A1 Steel as recommended.

2 dks Iron & 1 dks Steel Lloyd's Register

Call D.B. Particulars appended