

Spar, Awning or Part Awning Dk.

IRON OR STEEL STEAMER.

(Received at London Office)

State if Report is also sent on the Machinery of the Vessel *Yes*

Date of completion of Report *31st May 1902* Port of *Sunderland*

No. *16531* Survey held at *Sunderland* Date, First Survey *December 21/91* Last Survey *May 31st 1892*

On the *1st Aug. 88* *Steel* *1915-32* "GRANGWOOD"

Rig *Fore and aft*

TONNAGE under
Tonnage Deck...
Do. between Tonnage Dk.
and 3rd, 4th, Spar or
Awning Dk.

~~Spar, Awning or~~ PART AWNING-DECKED VESSEL,

or a Vessel having a continuous Shade Deck.

CLASS *100A.1 "STEEL"*

Master *A. J. G. Soltan*

Year of Appointment *1892*
(1) As Master in service of
owner of present vessel:—*1892*
(2) As Master of this
vessel:—*1892*

Total under Upper Dk.
Do. of Poop
Do. of Deck ()
Do. of Break
Do. of Bridge House
Do. of Houses on Deck
Do. of excess of Hatchways
Do. of Forecasts
Do. above Crown of
Engine Room
Gross Tonnage *2539.40*
Less Crew Space *65.80*
Less above Crown of
Engine Room
TONNAGE FOR FEES... *2473.90*
Less Engine Room *812.70*
Less Navigation Spaces *50.32*

Half Breadth (moulded) *20.37*

Depth from upper part of keel to top of Main Deck Beams *21.84*

Girth of Half Midship Frame (as per Rule) *37.71*

1st Number *79.92*

Length *293.33*

2nd Number *23441*

Proportions—Breadths to Length... *7.19*

Depths to Length—Main Deck to top of Keel *13.43*

Built at *Sunderland*

When built *1892* Launched *13th April*

By whom built *Messrs R. Thompson & Sons*

Owners *The Gratitude S.S. Co. (Ltd.)*

Managers *E. W. Morgan & Co.*

Residence *Finchchurch St. London*

Port belonging to *London*

Register Tonnage
as cut on Beam... *1630.88*

Destined Voyage *Coff. Hence Riva Plate* If Surveyed while Building, Afloat, or in Dry Dock *Blag. & Afloat*

LENGTH on Deck as per Rule.....	Feet. Inches.	BREADTH— Moulded..	Feet. Inches.	DEPTH, top of Floors to Spar or Awn. Dk. Beams Do. do. Main Deck Beams	Feet. Inches.	Power of Engines	Horse.	No. of Decks with flat laid No. of Tiers of Beams
<i>293</i>	<i>4</i>	<i>40</i>	<i>9</i>	<i>18.5</i>	<i>78</i>	<i>8</i>	<i>220</i>	<i>one</i>

Dimensions of Ship per Register, Length *295.0* breadth *41.05* depth *18.5* Spar or Awn. Dk. Moulded depth, ft *21* ins. *0* To Main Dk. Beam, Main Dk *8 1/2* ins.

FORGINGS AND CASTINGS.

KEEL, Bar or Side Plates, depth and thickness

STEM, moulding and thickness

STERN-POST for Rudder do. do.

" " for Propeller.....

MAIN PIECE of Rudder, diameter at head

do. at heel

RUDDER, how constructed

Can the Rudder be unshipped afloat?

FRAMING.

FRAME Angles, *or 1 Bar* for $\frac{1}{2}$ length amidships

Do. for $\frac{1}{2}$ at each end

Do. in way of Double Bottoms

Distance of Frames from moulding edge to

moulding edge, all fore and aft

VERSED FRAME Angles

DOORS, depth and thickness of Floor Plate

at mid-line for $\frac{1}{2}$ length amidships

" in way of Engines and Boilers.....

" thickness at the ends of vessel

" depth at $\frac{1}{2}$ the half-bdth. as per Rule

" height extended at the Bilges

DOORS & BRACKETS, in Cell Dble Bottoms

Distance apart.....

ENTRE GIRDER, in Double bottom, depth

and thickness

" Angles, Top *4 x 4 x 9/16* Bottom

SIDE GIRDERS, number and thickness.....

" Angles

MARGIN PLATE, depth (exclusive of flange)

and thickness

" Angles

INNER BOTTOM PLATING, breadth and

thickness of Middle Line Strake

" " thickness in Engine and Boiler space

" " Remainder in Holds

BEAMS, Spar or Awning Deck, Single Angle,

Bulb Angle, Plate or Tee Bulb

" Angles on upper edge

" Average space

BEAMS, Main Deck, Single Angle, Bulb

Angle, Plate or Tee Bulb

" Angles on upper edge

" Average space

BEAMS, Lower Deck, Single Angle, Bulb

Angle, Plate or Tee Bulb

" Angles on upper edge

" Average space

BEAMS, Hold, or Orlop, Plate or Tee Bulb

" Angles on upper edge *See lower edge*

" Average space

BEAMS, Poop Deck, Angle, Bulb Angle, Plate

or Tee Bulb

" Angles on upper edge

" Average space

BEAMS, Bridge Deck, Angle, Bulb Angle,

Plate, or Tee Bulb

" Angles on upper edge

" Average space

BEAMS, Forecastle Deck, Angle, Bulb Angle,

Plate or Tee Bulb

" Angles on upper edge

" Average space

PILLARS, In 'tween Decks, Size and Spacing

" " Hold

WEB FRAMES, In Fore Body, No. and spacing

" " br'dth and thickness

" No. of Side Stringers

WEB FRAMES, In After Body, No. and spacing

" " br'dth and thickness

" No. of Side Stringers

" Size of Angles or Tee Bars to Web Frames

BRACKET PLATES to Stringers between

Web Frames, depth and thickness

Inches in Ship.

Inches per Rule.

KEELSONS AND STRINGERS.

CENTRE LINE KEELSON, Vertical Plate above

floors, Through Plate, or Intercoastal Plate

" Rider Plate

" Bulb Plate to Intercoastal Keelson

" Horizontal Plates on Floors

" Angles

SIDE KEELSON, Angles

" Bulb or Plate above floors, for length

" Intercoastal Plate, for length

" Attached to outside Plating with Angle...

BILGE KEELSON, Angles

" Bulb or Plate above floors, for length

" Intercoastal Plate, for length

" Attached to outside Plating with Angle ..

BILGE STRINGER Angles

" Bulb Plate, for length

" Intercoastal Plate, for length

" Attached to outside Plating with Angle ..

SIDE STRINGER Angles

" Bulb or Intercoastal Plate, for len.

Part Spar, or Awning Deck Stringer Plates, on

ends of Beams, breadth and thickness

" Angle on ditto

" Tie Plates, fore and aft, outside Hatchways

" Diagonal Tie Plates on Bms., No. of prs.

" Flat of Deck * Iron or Steel, for whole len.

" " Wood — Material and thickness

" How fastened to Beams

Main Deck Stringer Plate, breadth & thickness

" Angles on ditto, No. *one*

" Tie Plates, outside Hatchways

" Diagonal Tie Plates on Bms., No. of prs.

" Flat of Deck * Iron or Steel, for whole len.

" " Wood — Material and thickness

" How fastened to Beams

Lower Deck Stringer Plates, br'dth & thickn's

" Angles on ditto, No. *one*

" Tie Plates, outside Hatchways

" Flat of Deck * Material and thickness

" How fastened to Beams

Hold, or Orlop Stringer Plate, br'dth & thekn's

" Angles on ditto, No.

" Tie Plates, outside Hatchways

" Flat of Deck. Material and thickness

" How fastened to Beams

Poop Deck Stringer Plate, breadth & thickness

" Angles on ditto

" Tie Plates

" Flat of Deck. Material and thickness

" How fastened to Beams

Bridge Deck Stringer Plate, br'dth & thickness

" Angle on ditto

" Tie Plates

" Flat of Deck. Material and thickness

" How fastened to Beams

Forecastle Deck Stringer Plate, br'dth & th'kns

" Angle on ditto

" Tie Plates

" Flat of Deck. Material and thickness

" How fastened to Beams

PLATING.

FLAT PLATE KEEL, breadth and thickness

" Dblng or incrsd thickn's & len. appl.

PLATES in Garboard Strakes, breadth & thickn's

" from Garboard to lower part of Bilges

" State Thickness of Plating in way of Double Bottom.

" Bilges, No. of Strakes and thickness

" Of doubling at Bilge, or increased thickness,

and length applied

" from up. part of Bilge to l. edge of Sh'rstrake

" Main Sheerstrake, breadth and thickness

" Of doubling at Sh'rstk. & lng. applied

" from Main to Spar or Awn. Dk. Sh'rstk

" Spar or Awn. Dk. Sh'rstk, br'dth & thickn's

" Poop sides

" Bridge sides

" Forecastle sides

" of Plating

Inches in Ship.

Inches per Rule.

16ths or 20ths in Ship.

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Inches per Rule.

BULKHEADS. No. in Vessel 212 No. Reqd. by Rule 212

Ceiling betwixt Decks, thickness and material P. 2

W. T. BULKHEADS Thickness 7.6 Angles 5x3x20 Spacing 30 Height up. all to top of RR. Sngl. or Dbl. Frames. double

Partitions - Hrztntl. 7.5x3x20 4.8

Longitudinal - Vrtel. - - - - -

Number of Breasthooks Five & deep Floors

Crutches Two & deep Floors

Are the outside Plates doubled two spaces of Frames in length? yes

The FRAMES extend in one length from Middle line to Tank side & thence to Gunwale

The REVERSED ANGLE on floors and frames extend from the middle line to the upper side stringer & Raised Quarter deck alternately; and all to Main deck

RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.

Garboard, double riveted to Bas Keel or Flat Plate Keel, with rivets 1 in. diameter, averaging 4 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, and double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, treble or double riveted; treble for - lgth.; with rivets - in. dia., averaging - ins. from cr. to cr.

Butts of - Strakes at Bilge for - length, treble riveted with Butt Straps - thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double - riveted; with rivets 7/8 in. diameter, averaging 3 1/8 ins. from centre to centre.

Butts from Bilge to Main Sheerstrake, worked carvel, treble or double riveted; treble for - lgth.; with rivets - in. dia., averaging - ins. from cr. to cr.

Edges of Main Sheerstrake, double - riveted.

Butts of Main Sheerstrake, treble riveted for whole length amidships.

Butts of Main Stringer Plate, treble riveted for half length amidships.

Butts of Inner Bottom Plating double riveted for half length.

Breadth of edge laps of Shell Plating in double riveting 4 1/2 x 5 1/2 x 6.

Butt Straps of Shell Plating, breadth and thickness 19 x 15/16 x 1/4.

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double, riveted.

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. S. Martin Steel. Plates: - Moor Co. Consett. Stockton Trade Co. Angles: - Steel Co. of Scotland. Lanarkshire S. Co. Bolman Long. Palmers Co. Iron Plates: - Stockton Trade Co. Moor Co. Angles: - Stockton Trade Co. Mast Plates: - Moor S. S. Co.

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

Is the riveted work properly closed? yes

Are the liners between the frames and plates solid single pieces? yes

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

from the faying surfaces? yes

Are the butts of Plating, Stringers, &c., properly shifted and strapped? yes

Do the holes for riveting plate to frames, butt straps, or plate Are the rivet holes well and sufficiently countersunk in the plate and punched

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

MASTS, SPARS, &c.

	Material.	Total length.	DIAMETER AND THICKNESS.			No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Round.		Number.	Size.	Seams.	Butts.
LOWER MASTS....	Fore	Steel 76.7	20 x 1/20	16 x 1/20	16 x 1/20	Two	-	-	Single	Str. & overlap
	Main	- do -	20 x 1/20	16 x 1/20	16 x 1/20	- do -	-	-	-	-
	Mizen	-	-	-	-	-	-	-	-	-

Bowsprit

Topmasts, Yards and Remainder of Spars are of Pitch Pine

Rigging, Material and Size, Shrouds B. B. Galvanized Iron 3in

Sails. One complete Suit of fore & aft rig S Sails and the following spare sails Stays B. B. Galv? Iron 3 1/2 ins.

EQUIPMENT No. 26371 LETTER S ANCHORS.

Number of Certificate.	WEIGHT, EX STOCK	WEIGHT OF STOCK	TEST, PER CERTIFICATE.			W'IGHT REQ. P'R RULE			Description of Anchor.	Makers.	Where and when tested and Superintendent.	
			Tons.	Cwts.	qrs.	Cwts.	qrs.	lbs.				
23363	1st Bower ..	41 0 0	-	-	-	36	10	0	40 0 0	Tyzack's pat.	G. Tyzack	Sid. 2/3/92 J. Harkness
23364	2nd ..	40 1 14	-	-	-	36	0	2	40 0 0	- do -	- do -	- do -
23365	3rd ..	34 2 14	-	-	-	32	1	3	34 0 0	- do -	- do -	- do -
	4th ..	-	-	-	-	-	-	-	-	-	-	-
	Collective weight	116 0 0	-	-	-	-	-	-	114 0 0	Ordinary	N. Hingley & Co.	Tptn. 27/2/92 E. R. Leitch
14377	Stream	10 2 1	2	3	3	12	10	3	10 2 0	- do -	- do -	- do -
14332	Kedge	5 1 1	1	1	16	7	14	0	5 1 0	- do -	- do -	- do -
14373	2nd Kedge ..	2 2 6	0	3	22	5	2	2	2 2 0	- do -	- do -	- do -

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate Tons.	Weight of Chain Cable.	Fathoms & Size. Per Rule.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.			Fathoms & Size. Per Rule.
									Fathoms.	Size.	Weight.	
12725	135	1 1/2	39 1/2	82 1/2	270-1 1/2	Stud	N. Hingley & Co.	Tptn. 18/3/92 E. R. Leitch	Towline* Steel	90	3 1/2	90-9 1/2 x 3 1/2
12726	135	1 1/2	- do -	225-0-24	- do -	- do -	- do -	- do -	Hawser Manilla	90	7 1/2	90-7 1/2
12740	-	-	-	-	-	-	-	-	-	90	6	-
Iron Stream Chain	75	1 1/2	22 1/2	34 1/2	75-1 1/2	Stud	- do -	- do -	-	2-90	4	-
Towline*if steel wire	90	4"	33	-	90-4"	-	Bullivant & Co.	- do -	-	2	Heaving Lines	-

Boats 2 Life and 2 Ordinary

Pumps, Number Nine

The Windlass is Emerson Walker's patent

Engine Room Skylights. How constructed? Plates & bars in the usual way

What arrangements for deadlights in bad weather? Shutters & Bull's eye lights

Coal Bunker Openings. How constructed? Plates & bars

How are lids secured? Hatch bars & clips

Height above deck? 18 ins.

Number of Scuppers, and number and dimensions of Freeing Ports, &c. 3 Scuppers & 3 Freeing ports of the following sizes, or each on R. G. D. - 3 1/4 x 24 - 3 3/4 x 24 - 3 1/2 x 24

Cargo Hatchways. How formed? Plates & bars in the usual way

Hatches. - If strong and efficient? yes

State size No. 1 Hatch (Forward) 16-0 x 13-0 x 18 No. 2 Hatch 20-0 x 13-0 x 18 No. 3 Hatch 20-0 x 13-0 x 30 No. 4 Hatch 16-0 x 13-0 x 30

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch No. 1: - 1 Shifting Beam & 1 Fore & after: No. 2 & 3: - 1 deep

Web plate and 3 Fore & afters: No. 4: - 1 Shifting beam & 3 Fore & afters

Bulwarks, height above deck and description 3-6" - Plate on R. G. D. - elsewhere

Main Rail, material and size 6 x 3 Built angle

The above is a correct description.

Builder's Signature (here only.) Robert Thompson & Sons

Surveyor's Signature John Roberts

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

Order for Special Survey No. 3264 Date 19 Oct 91 Order for Ordinary Survey No. Date 17/4 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. Total No. of Visits 111

State dates and initials of letters respecting this case M-14/10/91; M-20/10/91; M-30/11/91; M-15/1/92; M-25/1/92; E-3/2/92; M-19/5/92

General Remarks (State quality of workmanship, &c.) This Partial Awning deck Steel Screw Steamer has been built in accordance with the approved plans: the Secretary's letters of the above mentioned dates relating to this case; and in other respects, in accordance with the Rules. The workmanship throughout is good, & the steel used in her construction has been duly tested as required by the Rules & Circulars of the Society. This vessel is fitted with four of Welford's patent steam winches, one to each hatchway; Haslie & Co. hand steering gear, and Alley & McLehans steam steering gear.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 28.8 ft., R.Q.D. or Break 22.0 ft., Bridge Dk. 16.4 ft., Forecastle ft., (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated.

All erections connected — Part Awning deck vessel. No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 1 SR (Steel); 1 Tier of Beams & Web Frames. Official No. 99081; Signal Letters —

PARTICULARS OF WATER BALLAST— Double bottom, aft, length — and water capacity in tons — Double bottom, forward, length — and water capacity in tons — Double bottom, under engines and boilers, length — and water capacity in tons — If under Engines only, or Boilers only, state which — Double bottom, constructed on the cellular system, length 24.2 ft. and water capacity in tons 481. Fore peak tank, water capacity in tons — After peak tank, water capacity in tons 51. Midship deep tank, length — and water capacity in tons — Other tanks, if fitted, length — and water capacity in tons — The above have duly been tested as required by the Rules. (If necessary, furnish further information by sketch.) How are the surfaces preserved from oxidation? Inside Portland Cement and Paint Outside Paint only

FREEBOARD assigned by the Committee, as per Secretary's Letter, dated 19th April 1892. In Summer 8 ft. 7 1/2 ins. In Winter 8 ft. 11 ins. For Winter in North Atlantic 9 ft. 3 ins. Fresh Water above the centre of disc 4 1/2 ins. To top of Wood, Iron or Steel Upper Spar, Awning, or Part Awning Deck. Statutory deck bar.

The amount of Entry Fee £ 5: - : is received by me, 22/6/92. Special £ 86: 14: 0 Certificate to be sent to. Travelling Expenses, if any £ - : - : I am of opinion this Vessel should be Classed 100A1 "STEEL" "P. Awning Deck" A. & C.P. Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute FRI 17 JUN 1892 Character assigned 100A1 Steel Large Pt. Awning dk. with freebd. 58.7 1/2 100A1 Steel Pt. Awning dk. (Iron) W.B. = All D.B. &c. (particulars above) Lloyd's Register Foundation