

Spar, or Awning Dk.

IRON OR STEEL STEAMER.

No. 5637

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

Port of *Aberdeen* Date of completion of Report *October 28th 1897* Received at London Office *28th 1897*

Survey held at *Aberdeen* Date, First Survey *Sept 18th 1896* Last Survey *October 28th 1897*

On the *Iron Steamer Angeli* Rig *Bugantine*

TONNAGE under
Tonnage Deck... *270.62*
Do. between Tonnage Dk.
and 3rd, 4th, Spar or
Awning Dk.
Total under Upper Dk. *270.62*
Do. of *Chart House* *3.93*
Do. of *Boiler Room* *96.96*
Do. of *Forecastle* *42.28*
Do. of Houses on Deck *67.82*
Do. of excess of Hatchways *9.70*
Do. above Crown of
Engine Room...
Gross Tonnage *2928.46*
Less Crew Space *97.66*
Less above Crown of
Engine Room...
TONNAGE FOR FEES... *2830.8*
Less Engine Room *937.11*
Less Navigation Spaces *30.08*

Register Tonnage
as cut on Beam... *1863.61*

SPAR, AWNING OR PART AWNING-DECKED VESSEL,

-or a Vessel having a continuous Shade Deck.

CLASS *AI Steel Spar Deck*

FEET.

Half Breadth (moulded) *20.5*Depth from upper part of keel to top of Main Deck Beams *20.62*Girth of Half Ship's Frame (as per Rule) *37.2*1st Number *78.32*Length *328.33*2nd Number *25714.8*Proportions—Breadths to Length *8.0*Depths to Length—Main Deck to top of Keel *15.9*Destined Voyage *London & Natal*Master *C. Stuart*Year of Appointment *(1) As Master in service of
owner of present vessel:—18.81
(2) As Master of this
vessel:—18.97*Built at *Aberdeen*When built *1897* Launched *Augth 28th 1897*By whom built *Thall Russell & Co*Owners *J. T. Rennie & Son*

Managers

(Where necessary to be entered in Reg. Book.)

Residence *Aberdeen*Port belonging to *Aberdeen*If Surveyed while Building, Afloat, or in Dry Dock *Yes*

LENGTH on Deck Feet. Inches. *328 4* BREADTH—Feet. Inches. *41 0* DEPTH, top of Floors to Spar or Awn. Dk. Beams Feet. Inches. *20 0 3* Power of Horse. *428* No. of Decks with flat laid *Two*
as per Rule... Moulded... Do. do. Main Deck Beams... Engines... No. of Tiers of Beams *2*

Dimensions of Ship per Register, Length *328.5* breadth *41.2* depth *26.05* Spar *Awning* Dk. Moulded depth, ft. *19* ins. *8 1/2* To Main Dk. Round up of *11* ins.
Main Deck.

FRAMING.			FORGINGS AND CASTINGS.			KEELSONS AND STRINGERS.		
Inches in Ship.	Inches in Ship.	15ths or 20ths per Rule Or as Approved.	Inches in Ship.	Inches in Ship.	20ths per Rule Or as Approved.	Inches in Ship.	Inches in Ship.	20ths per Rule Or as Approved.
FRAME, Angles, or L, C or L Bars, for length amidships			KEEL, Bar or Side Plates, depth and thickness			CENTRE LINE KEELSON, Vertical Plates above floors, Through Plate, or Intercoastal Plate		
Do. for 1/2 at each end			STEM, moulding and thickness	<i>10 x 2 1/2</i>	<i>10 x 2 1/2</i>	Do. Rider Plate	<i>14</i>	<i>11</i>
Do. in way of Double Bottoms at Solid Floors	<i>3</i>	<i>3</i>	STERN-POST for Rudder do. do.	<i>10 x 6</i>	<i>10 x 6</i>	Bulb Plate to Intercoastal Keelson		
at intermdt. Bkts.	<i>5</i>	<i>3</i>	" " for Propeller	<i>10 x 6</i>	<i>10 x 6</i>	Horizontal Plates on Floors	<i>12</i>	<i>11</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24</i>	<i>24</i>	MAIN PIECE of Rudder, diameter at head	<i>8 1/2</i>	<i>8 1/2</i>	Angles	<i>6 1/2</i>	<i>4</i>
REVERSED FRAME, Angles	<i>3 1/2</i>	<i>3</i>	do. at heel	<i>4 1/2</i>	<i>4 1/2</i>	Bulb or Plate above floors, for whole lng.	<i>10</i>	<i>10</i>
DEEP FRAMING, depth of girder			RUDDER, how constructed <i>Forged with flat plate</i>			Intercoastal Plate, for 1/2 length	<i>3 1/2</i>	<i>9</i>
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	<i>24</i>	<i>11</i>	Can the Rudder be unshipped afloat? <i>Yes</i>			Attached to outside plating with Angle	<i>3 1/2</i>	<i>9</i>
" in way of Engines and Boilers	<i>24</i>	<i>12</i>				BILGE KEELSON, Angles	<i>6 1/2</i>	<i>4</i>
" thickness at the ends of vessel		<i>8</i>				Bulb or Plate above floors, for whole lng.	<i>10</i>	<i>10</i>
" depth at 1/2 the half-bdth. as per Rule	<i>12 1/2</i>	<i>12 1/2</i>				Intercoastal Plate, for 1/2 length	<i>3 1/2</i>	<i>9</i>
" height extended at the Bilges	<i>48</i>	<i>48</i>				Attached to outside plating with Angle	<i>3 1/2</i>	<i>9</i>
FLOORS & BRACKETS, in Cell Dble Bottoms Distance apart	<i>24</i>	<i>7</i>				BILGE STRINGER Angles		
CENTRE GIRDER, in Double bottom, depth and thickness	<i>40</i>	<i>10-8</i>				Bulb Plate, for length		
" Angles, Top	<i>4</i>	<i>4</i>				Intercoastal Plate, for length		
" Bottom	<i>6 1/2</i>	<i>4</i>				Attached to outside plating with Angle	<i>7 1/2</i>	<i>4</i>
SIDE GIRDERS, number and thickness	<i>3</i>	<i>7</i>				3SIDE STRINGER Angles	<i>18</i>	<i>8-7</i>
" Angles	<i>3 1/2</i>	<i>3 1/2</i>				Bulb or Intercoastal Plate, for whole lng.	<i>3 1/2</i>	<i>3</i>
MARGIN PLATE, depth (exclusive of flange) and thickness	<i>26</i>	<i>8-7</i>				Attached to outside plating with Angle		
" Angles	<i>3 1/2</i>	<i>3 1/2</i>						
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	<i>36</i>	<i>9-8</i>						
" thickness in Engine and Boiler space		<i>7</i>						
BEAMS, Spar or Awning Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	<i>8</i>	<i>5</i>						
" Angles on upper edge								
Average space	<i>48</i>	<i>48</i>						
BEAMS, Main Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	<i>7 1/2</i>	<i>3</i>						
" Angles on upper edge								
Average space	<i>24</i>	<i>24</i>						
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb								
" Angles on upper edge								
Average space								
BEAMS, Mold, or Orlop, Plate or Tee Bulb								
" Angles on upper 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	<i>6 1/2</i>	<i>3</i>						
" Angles on upper edge								
Average space	<i>48</i>	<i>48</i>						
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	<i>7</i>	<i>5</i>						
" Angles on upper edge								
Average space	<i>48</i>	<i>48</i>						
ULLAKS, In tween Deck, size and spacing	<i>2 1/2</i>	<i>48</i>						
" Hold	<i>3 1/2</i>	<i>48</i>						
Quarter, tween Dks., "								
" in Hold								
FRAMES, In Fore Body, No. and spacing brdth. & thickness	<i>7</i>	<i>18</i>						
No. of Side Stringers	<i>2</i>	<i>18</i>						
FRAMES, In E. & B. Space, No. & spacing brdth. & thickness	<i>6</i>	<i>18</i>						
" "	<i>18</i>	<i>18</i>						
FRAMES, In After Body, No. and spacing brdth. & thickness	<i>18</i>	<i>18</i>						
" "	<i>18</i>	<i>18</i>						
No. of Side Stringers	<i>2</i>	<i>18</i>						
Size of Angles or Tee Bars to Web Frames	<i>6</i>	<i>4</i>						
T PLATES to Stringers between frames, depth and thickness	<i>20</i>	<i>7</i>						

BULKHEADS. Number. Thickness. STIFFENERS. Single or Double Frames. Height up.

In Vessel. Per Rule. Horizontal. Vertical. Spacing.

W. T. BULKHEADS *5* *5* *7-6* *5 x 3 x 8* *30 x 48* *double* *deck*

PARTITION *4* *4* *5 x 3 x 8* *5 x 3 x 8* *30 x 48* *single* *"*

LONGITUDINAL, *"* *"* *"* *"* *"* *"* *"*

Are the outside Plates doubled two spaces of Frames in length? *Yes*Lloyd's Register
Foundation
ABW14-0354(12)

PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.			BUTTS.									
	AMIDSHIP.		FORWARD.		AFT.		Single or Double.	Breadth of Lap.	RIVETS.		Double or Treble and for what Length.	RIVETS.		STRAPS.		IF LAPPED.			
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.			Diam.	Spacing or to cr.		Diam.	Spacing or to cr.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	For what Length.
FLAT PLATE KEEL	38	16	12	12	38	16	Double	6 to 5 1/4	1 1/8	4 1/2	Through	1 1/8	3 1/2	1 1/2	1 1/2	20	20		
(If Bar Keel, state Riveting)																			
GARBOARD OF A Strake	46	12	11	11	46	12		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
State actual thickness in way of Double Bottom.																			
B "	56 1/2	11	9	9	56 1/2	11		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
C "	46	12	9	9	46	12		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
D "	52 1/2	11	9	9	52 1/2	11		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
E "	46	12	9	9	46	12		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
F "	51 1/4	12	9	9	51 1/4	12		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
G "	56 1/2	11	9	9	56 1/2	11		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
H "	46	12	9	9	46	12		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
J "	54 1/2	11	9	9	54 1/2	11		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
K "	42	13	9	9	42	13		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
L "	47 1/2	10	9	9	47 1/2	10		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
M "	46	14	9	9	46	14		5 1/4	3/8	3 1/2	Double	3/8	3 1/2	1 1/2	1 1/2	20	20		
N "	36	7	7	7	36	7		4 1/2	3/4	3	Double	3/4	2 1/2	9 1/4	20	20			
O "	49	7	7	7	49	7		4 1/2	3/4	3	Double	3/4	2 1/2	9 1/4	20	20			
P "																			
Q "																			
DOUBLING of Flat Plate Keel																			
Length and thickness of Bilges																			
of Sheerstrakes																			
of Strake below																			
POOP SIDES																			
BRIDGE SIDES																			
FORECASTLE SIDES																			

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c. *Siemens Martin steel.*
Stockton, Newton, Moss, Mithan
Palmers, Motherwell

Spar or Awning Butts, treble riveted for $\frac{1}{2}$ length amidship.
Stringer Plate Butts, single, double or overlapped for $\frac{1}{2}$ length amidship.
Main Stringer Plate Butts, treble riveted for $\frac{1}{2}$ length amidship.
Butts of Bilge & Side Stringers and Tie Plates, treble or double riveted for $\frac{1}{2}$ length amidship.
Inner Bottom Plating, riveting of Edges single lap Butts $\frac{1}{2}$ length.
Centre Girder Butts, Treble riveted **Keelson Butts**, Treble riveted.
Frames, riveted through Plates with $\frac{1}{8}$ in. Rivets, about 68 apart.
Rivets, state whether Iron or Steel *Iron*

FRAMES extend in one length from *Steel* to *Gunnale*
REVERSED FRAMES on floors and frames extend from *To spar & main deck alternately; to spar 8 ft in way of erections; and to spar & forecastle, bridge deck alternately in way of those erections.*

MASTS, SPARS, &c.

	Material.	Total Length	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hounds.	Head.		Number.	Size.	Seams.	Butts.
POLE											
LOWER MASTS											
Fore	steel	116-3	24	19	19	20	2	2	3 1/2 x 3 1/2	single	above all treble
Main	steel	110-0	24	19	19	20	2	2	3 1/2 x 3 1/2	single	below - double
Mizen	an 8-0 pole on the top of each mast										
Bowsprit											
Topmasts, Yards and Remainder of Spars											
Rigging, Material and Size, Shrouds											
Sails.	<i>one</i>	Suit of <i>fore & aft</i>									

EQUIPMENT No. 32185 LETTER M. ANCHORS.

Number of Certificate.	Anchors.	WEIGHT, EX. STOCK			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.				WEIGHT REQ. BY RULE.			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.			
39621	1st Bower	40	3	22	10	0	13	36	10	0	0	34	3	2	Iron stock Rodgers	W. Hingley + Sons Ltd	Robertson 27/7/97. W. Green
39620	2nd "	40	2	1	9	2	24	36	4	1	14	32	3	2	JD	JD	" 27/7/97 "
39619	3rd "	35	0	6	8	1	22	32	9	1	14	31	0	0	JD	JD	" 27/7/97 "
	Collective weight	116	2	1								104	0	0			
39624	Stream	11	3	19	2	2	13	13	17	2	0	11	1	0	ordinary	W. Hingley + Sons Ltd	Robertson 27/7/97. W. Green
39641	Kedge	5	2	6	1	1	26	7	18	1	21	5	2	0	-	JD	" 31/7/97 "
	2nd Kedge																

CHAIN CABLES.

HAWSERS AND WARPS.

Number of Certificate.	Fathoms.	Size.	Test per Certificate, Tons.	WEIGHT OF CHAIN CABLE.		Fathoms and Size Per Rule.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size Per Rule.
				Supplied.	Per Rule.									
28442	135	2	100-16-0-0 72-0-0-0	2692-13	511-1-14	270-1 15 16	Steel Link	R. Thompson Sons Lim	Pertherton 31/7/97. H. Green	steel wire TOWLINE	100	4"	533	100-4"
28441	135	2	100-16-0-0 72-0-0-0	2691-23										
				269-0-5	538-3-0					HAWSER	90	10"		90-10"
										WARP	90	8 1/2"		90-8 1/2"
Two Stream Chain or Steel Wire ...	90	4 1/2	3500-0	-	-	90-4 1/2	steel wire							

Boats *Pine - 4 life boats + 2 cutters*
Pumps, Number *5*
Windlass is *Clarke, Chapman's Iron (patent)* **Capstan** *none*
Engine Room Skylights—How constructed? *Feather*
What arrangements for deadlights in bad weather? *slide rods + pins*
Coal Bunker Openings—How constructed? *on ship's side* How are lids secured? *chains + latches* Height above deck? *2-0*
Number of Scuppers, and number and dimensions of **Freeing Ports, &c.** *6 on each side. One freeing port on each side of*
Ceiling in Holds, thickness and material *2 1/2 Pine* **Ceiling 'tween Decks**, thickness and material *1 1/2 Pine*
Cargo Hatchways—How formed? *steel coamings 2-0 high* **Hatches**, If strong and efficient? *yes*
State size No. 1 Hatch (Forward) *20-0 x 12-0* **No. 2 Hatch** *28-0 x 15-0* **No. 3 Hatch** *26-0 x 15-0* **No. 4 Hatch** *none*
Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch *no 1 hatch has one deep portable web frame + 2 fore + afters. no 2 + 3 hatches have each two deep portable web frames + 2 fore + afters.* **No. of Breasthooks** *4* **No. of Crutches** *4*
Bulwarks, height above deck and description *steel 3-6 aft only. Railor slanting forward* **Main Rail**, material and size *10 x 3 steel*
The above is a correct description.
Builder's Signature (here only) *Hall Russell & Co.* **Surveyor's Signature** *Francis Robertson*
Surveyor to Lloyd's Register of British & Foreign Ships

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with this case) *one each dated 11/1/96, 15/12/96, 28/12/96, 3/1/97 respectively, & marked M. — One dated 13/2/97, marked E*

Workmanship. Are the butts of plating planed ~~or otherwise fitted?~~ *yes*

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*

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

This is a open hull vessel built of steel under special survey in accordance with the approved plans & the rules requirements. The materials and workmanship are good. —

she is fitted with the Electric Light.

The peaks, double bottom tanks, waterways and upper decks have been tested by water and found tight. The deck pumps have been tried and the sluice valves, watertight doors &c. are in order. —

The Longitudinal section, & the plans of the rigging, masts and spars, rudder, and forging reports are herewith enclosed. — The midship section plan was forwarded on the 25th inst. —

The Surveyor should state the Number of Report and Name of any Sister Vessel. *✓*

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *none* ft., R.Q.D. or Break *—* ft., Bridge Dk. *104* ft., F'castle *35* ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated

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) *20th steel (one of these wood sheathed) + web frames*

Official No. *108651*; Signal Letters *✓*

How are the surfaces preserved from oxidation? Inside *By cement + paint* Outside *By paint*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system *yes*

Where fitted.	Length.	Water Capacity.	Where fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft, <i>86</i>	<i>36-0</i>	<i>103</i>	Fore peak tank,	<i>none</i>	<i>✓</i>
Double bottom, forward, <i>124</i>	<i>50-0</i>	<i>90</i>	After peak tank,	<i>"</i>	<i>✓</i>
Double bottom, under Engines and Boilers,	<i>46-0</i>	<i>43</i>	Midship deep tank,	<i>"</i>	<i>✓</i>
Double bottom, if under Engines only,	<i>78-0</i>	<i>170</i>	Other tanks, if fitted,	<i>"</i>	<i>✓</i>
Double bottom, if under Boilers only,	<i>none</i>	<i>408</i>	(If necessary, furnish further information by sketch.)	<i>"</i>	<i>✓</i>

State whether the above have been tested as required by the Rules. *yes*

Order for Special Survey No. *736*

Date *Nov 16th 1896*

Order for Ordinary Survey No. *✓*

Date *✓*

No. *0303* 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

*1896. Dec 18. 22. 28. 30 — Jan 7. 13. 18. 29 — Feb 2. 6. 10. 17. 18. 25 — 1897. March 2. 9. 12. 16. 19. 24. 29. April 2. 6. 9. 14. 20. 23. 28 — April 30. May 6. 11. 14. 18. 21. 25. 28. — June 1. 4. 8. 11. 15. 18 — June 23. 24. 26. 28. July 2. 9. 23. 29. 31. — August 4. 14. 17. 25. 28 — Sept 1. 3. 7. 9. 14. 10. 18. 24. 28. Oct 1. 8. 11. 15. 25. 27. 28. Total No. of Visits *42**

The amount of Entry Fee *£ 5* : :
Special Survey Fee *£ 95* : *15* :
Travelling Expenses, if any *£ none*

Fees applied for, *Oct 28th 1897*
Received by me, *17. 11. 18. 97*

Certificate to be sent to *This office*

I am of opinion this Vessel should be Classed *+100A "Steel", "Spar deck"*
With, or without Freeboard, as condition of Class *without*

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

Committee's Minute

FRI. 29 OCT 1897

Character assigned

2 a top + 2 m 10, 97

elec. light

100A Steel Spar dk.

1 dk (SIL) + Spar dk. (SIL - 47) + Web frames