

1 or 2 Dks., R.Q.Dk.,  
and Pt. Awng. Dk.

# IRON OR STEEL STEAMER.

State if Report is also sent on the Machinery of the Vessel *Yes*  
Date of completion of Report *25 August 1898*

BOX CASE No. 16367  
Received at London Office *MON 5 SEP 1898*

Survey held at *Glasgow*  
On the *Steam Steamer "Achroite"*

Date, First Survey *14 December 1897*

Port of *Glasgow*  
Last Survey *14 August 1898*  
Rig *Schooner*

TONNAGE under  
Tonnage Deck *939.67*  
Do. of Poop *28.49*  
Do. of Raised Or. *91.55*  
Dk. or Break *22.53*  
Do. of Bridge House *22.53*  
Do. of Forecastle *28.49*  
Do. of Houses on Deck *6.28*  
Do. of excess of Hatchways *34.17*  
Do. above Crown of *12.59*  
Engine Room *1195.68*  
Gross Tonnage *1195.68*  
Less Crew Space *78.8*  
Less above Crown of *12.59*  
Engine Room *1044.39*  
TONNAGE FOR FEES *1044.39*  
Engine Room *302.48*  
Navigation Spaces *78.8*  
Deck *24.48*  
Register Tonnage *729.62*  
as cut on Beam

ONE OR TWO DECKED VESSEL.  
CLASS *100 A-1*

Master *P. Walsh*

Year of appointment *1898*

Built at *Glasgow*  
When built *1898-8* Launched *4 August 1898*

By whom built *J. Sherrin & Son*

Owners *H. Robertson*

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

Residence *5, Gordon St., Glasgow*

Port belonging to *Glasgow*

Half Breadth (moulded) *17*  
Depth from upper part of Keel to top of Main Deck Bms. *17.46*  
Girth of Half Midship Frame (as per Rule) *31.5*  
1st Number *65.96*  
Length on deck from after part of stem to fore part of stern post *228.75*  
2nd Number *1088.35*  
Proportions—Breadths to Length *6.7*  
Depths to Length—Main Deck to top of Keel *13.1*

Destined Voyage *Baltic*

If Surveyed while Building, Afloat, or in Dry Dock Building Afloat

TH on Deck as *Feet. 220 9*  
BREADTH—*Feet. 34 0*  
DEPTH, ACTUAL—*Feet. 14 6 1/2*  
No. of Decks with Flat laid *one*  
No. of Tiers of Beams *one*  
ons of Ship per Register, Length, *230* breadth, *34.15* depth, *14.2* Moulded Depth, *16 ft. 9 ins.* Round of Beam, Actual *8 1/2 ins.*

## FRAMING.

IE, Angles, *7*, *E* or *L* Bars, for  $\frac{1}{2}$  length  
amidships *4 3 7 4 3 7*  
for  $\frac{1}{4}$  at each end *6 6*  
in way of Double Bottoms at Solid Floors *4 3 7 4 3 7*  
" " at intermediate Plats. *22 22*  
ice of Frames from moulding edge to  
ilding edge, all fore and aft *22 22*  
ERSED FRAME, Angles *3 3 7 3 3 7*  
P BRACING, depth of girder *3 3 7 3 3 7*  
ORS, depth and thickness of Floor Plate  
at mid line for  $\frac{1}{2}$  length amidships *22 22*  
in way of Engines and Boilers *6.9 6.9*  
thickness at the ends of vessel *7 7*  
depth at  $\frac{1}{4}$  length amidships *7 7*  
height extended at the Bilges *7 7*  
ORS & BRACKETS, in Cell Dble Bottoms *35 35 7 35 7*  
Distance apart *22 22*  
TRE GIRDER, in Double Bottom, depth  
and thickness *43 43 9 43 9*  
Angles, Top *4 4 8 4 4 8*  
Bottom *4 4 8 4 4 8*  
E GIRDERS, number on each side & thickness *one 7 2 7 2*  
Angles *3 3 7 3 3 7*  
GIN PLATE, depth (exclusive of flange)  
and thickness *27 27 8 27 8*  
Angles to Outside Plating *2 2 3 2 2 3*  
ER BOTTOM PLATING, breadth and  
thickness of Middle Line Strake *8.7 8.7*  
thickness in Engine and Boiler space *10 10*  
Remainder in Holds *7 7*  
AMS, Main and Raised Quarter Deck,  
Single Angle, Bulb Angle, Plate or Tee Bulb *8 8 3 8 3*  
Angles on Upper Edge *9 9 4 9 4*  
Average space *22 22*  
AMS, Lower Deck, Single Angle, Bulb  
Angle, Plate or Tee Bulb *8 8 3 8 3*  
Angles on Upper Edge *9 9 4 9 4*  
Average space *22 22*  
AMS, Hold, Plate or Tee Bulb *5 5 3 5 3*  
Angles on Upper Edge *7 7 0 7 0*  
Average space *22 22*  
AMS, Poop Deck, Angle, Bulb Angle, Plate  
or Tee Bulb *5 5 3 5 3*  
Angles on Upper Edge *7 7 0 7 0*  
Average space *22 22*  
AMS, Bridge or Pt. Awng. Deck, Angle,  
Bulb Angle, Plate or Tee Bulb *5 5 3 5 3*  
Angles on Upper Edge *7 7 0 7 0*  
Average space *22 22*  
AMS, Forecastle Deck, Angle, Bulb Angle,  
Plate or Tee Bulb *5 5 3 5 3*  
Angles on Upper Edge *7 7 0 7 0*  
Average space *22 22*  
LLARS, in *Fore Deck*, Size and Spacing  
Hold *3 3/4 in 45*  
Quarter, *Fore Deck*, " *3 3/4 in 45*  
in Hold *3 3/4 in 45*  
EB FRAMES, in Fore Body, No. and Spacing  
Brth. & Thickness *15 7 15 7*  
No. of Side Stringers *two*  
EB FRAMES, in E. & B. Space, No. & Spacing  
Brth. & Thickness *15 7 15 7*  
EB FRAMES, in After Body, No. and Spacing  
Brth. & Thickness *15 7 15 7*  
No. of Side Stringers *two*  
Size of Angles on Tee Bars to Web Frames  
BRACKET PLATES to Stringers between  
Web Frames, Depth and Thickness *30 7 30 7*

## FORGINGS AND CASTINGS.

KEEL, Bulb or Side Plates depth and thickness *8 1/2 8 1/2*  
STEM, moulding and thickness *8 1/2 8 1/2*  
STERN-POST for Rudder do. do. *8 1/2 8 1/2*  
for Propeller *8 1/2 8 1/2*  
MAIN PIECE of Rudder, diameter at head *5 1/2*  
do. at heel *5 1/2*  
RUDDER, how constructed *single plate (as per approved plan)*  
Can the Rudder be unshipped afloat? *Yes*  
KEELSONS AND STRINGERS.  
CENTRE LINE KEELSON, Vertical Plate above  
floors, Through Plate, or Intercoastal Plate  
Rider Plate *4 3 7 4 3 7*  
Bulb Plate to Intercoastal Keelson *4 3 7 4 3 7*  
Horizontal Plates on Floors *4 3 7 4 3 7*  
Angles *4 3 7 4 3 7*  
SIDE KEELSON, Angles *4 3 7 4 3 7*  
Bulb or Plate above floors for *lng.*  
Intercoastal Plate for *length*  
Attached to outside plating with Angle *4 3 7 4 3 7*  
BILGE KEELSON, Angles *4 3 7 4 3 7*  
Bulb or Plate above floors for *len.*  
Intercoastal Plate for *length*  
Attached to outside plating with Angle *4 3 7 4 3 7*  
BILGE STRINGER Angles *4 3 7 4 3 7*  
Bulb Plate for *length*  
Intercoastal Plate for *length*  
Attached to outside plating with Angle *4 3 7 4 3 7*  
SIDE STRINGER Angles *4 3 7 4 3 7*  
Bulb Intercoastal Plate for *white lng.*  
Attached to outside plating with Angle *4 3 7 4 3 7*

Main and Raised Quarter Deck Stringer  
Plate, breadth and thickness *60 10 60 10*  
Angle on ditto *4 3 7 4 3 7*  
Tie Plates fore & aft, outside Hatchways *4 3 7 4 3 7*  
Diagonal Tie Plates on Bms., No. of Pairs *4 3 7 4 3 7*  
Main Dk\* *10 10 6 10 6*  
R. Q. Dk\* *10 10 6 10 6*  
Wood Deck, Material & thickness *10.6 10.6*  
Lower Deck Stringer Plate, breadth and  
thickness *4 3 7 4 3 7*  
Angles on ditto, No. *4 3 7 4 3 7*  
Tie Plates, outside Hatchways *4 3 7 4 3 7*  
Deck\* Material and thickness *4 3 7 4 3 7*  
Hold Stringer Plate *4 3 7 4 3 7*  
Angles on ditto, No. *4 3 7 4 3 7*  
Poop Deck Stringer Plate, breadth & thickness *4 3 7 4 3 7*  
Angle on ditto *4 3 7 4 3 7*  
Tie Plates *4 3 7 4 3 7*  
Deck, Material and thickness *4 3 7 4 3 7*  
Bridge Deck Stringer Plate, brdth & thickness *54 8 54 8*  
Angle on ditto *4 3 7 4 3 7*  
Tie Plates *4 3 7 4 3 7*  
Deck, Material and thickness *4 3 7 4 3 7*  
Forecastle Deck Stringer Plate, brdth & thcknss *54 8 54 8*  
Angle on ditto *4 3 7 4 3 7*  
Tie Plates *4 3 7 4 3 7*  
Deck, Material and thickness *4 3 7 4 3 7*

BULKHEADS.  
In Vessel. Per Rule. Thickness. Horizontal. Vertical. Single or Double Frames. Height up.  
W.T. BULKHEADS *4 4 4 4 4 4*  
PARTITION *4 4 4 4 4 4*  
LONGITUDINAL *4 4 4 4 4 4*  
Are the outside Plates doubled two spaces of Frames in length? *Yes*  
Are the Side Vales and Watertight Doors in efficient working order? *Yes*

W405-0197



PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.				BUTTS.								
	Breadth.	Thickness.	Forward.	Aft.	Breadth.	Thickness.	Single or Double.	Breadth of Lap.	Diam.	Spacing or to cr.	Double or Triple and for what Length.	RIVETS.	STRAPS.	IF LAPPED.					
	Inches.	20ths.	20ths.	20ths.	Inches.	20ths.		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.					
Base Plate Keel (If Bar Keel, state Riveting) GARBOARD OR A STRAKE	35	11	10	10	35	11	Double	5 1/2	3/4	3/4	Double	3/4	3/4	11 1/2					
State actual thickness in way of Double Bottom.	B	9	8	8	9	8	---	5 1/2	3/4	3/4	Double	3/4	3/4	9					
C	10	8	8	8	10	8	---	5 1/2	3/4	3/4	---	3/4	3/4	9					
D	11	8	8	8	11	8	---	5 1/2	3/4	3/4	---	3/4	3/4	9					
E	12	8	8	8	12	8	---	5 1/2	3/4	3/4	---	3/4	3/4	9					
F	9	8	8	8	9	8	---	4 1/2	3/4	3/4	---	3/4	3/4	9					
G	10	8	8	8	10	8	---	4 1/2	3/4	3/4	---	3/4	3/4	9					
H	9	8	8	8	9	8	---	4 1/2	3/4	3/4	---	3/4	3/4	9					
J	42	11	9	9	35	11	---	5 1/2	3/4	3/4	Double	3/4	3/4	11 1/2					
K																			
L																			
M																			
N																			
O																			
P																			
DOUBLING of Flat Plate Keel																			
Length and thickness of Bilges																			
Length and thickness of Sheerstrakes																			
Length and thickness of Strake below																			
POOP SIDES																			
RAISED QUARTER DECK SIDES																			
BRIDGE SIDES																			
FORECASTLE SIDES																			
LENGTHS OF PLATING																			

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, outside Plating, &c. *Wm. D. & Co. Glasgow*

Main Stringer Plate Butts, treble riveted for *sole* length amidship.

Butts of Bilge & Side Stringers, and Tie Plates, treble or double riveted? *double*

Inner Bottom Plating, riveting of Edges *double*

Centre Girder Butts, *double* riveted. Keelson Butts, *double* riveted.

Frames, riveted through Plates with *6* in. Rivets, about *6* apart.

Rivets, state whether of Iron or Steel *Iron*

Has the Steel been tested as required by the Rules *yes*

FRAMES extend in one length from *margin* to *margin* & from *margin* to *deck*

REVERSED FRAMES on floors and frames extend from *deck* to *margin* and from *margin* to *upper side stringer* and *deck alternately*, double in way of *engines & boilers*

MASTS, SPARS, &c.											
LOWER MASTS...	Material.	Total length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hounds.	Head.		Number.	Size.	Seams.	Butts.
Fore	Steel	66	18 x 1/2	18 x 1/2	18 x 1/2	18 x 1/2	2	---	---	Single	Double
Main	---	60	18 x 1/2	18 x 1/2	18 x 1/2	18 x 1/2	2	---	---	Single	Double
Topmast	---	---	---	---	---	---	---	---	---	---	---
Yards and Remainder of Spars	---	---	---	---	---	---	---	---	---	---	---
Rigging, Material and Size, Shrouds	3/2 steel wire	---	---	---	---	---	---	---	---	---	---
Sails.	one	Suit of	---	---	---	---	---	---	---	---	---

EQUIPMENT No. *16398* LETTER *A* TONNAGE FOR TRAWLERS U.D.K.

ANCHORS.

Number of Certificate.	Anchors.	WEIGHT, EX STOCK.		WEIGHT OF STOCK.		TEST, PER CERTIFICATE.		WEIGHT REQUIRED BY TABLE 22.		Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	Cwts.			
33466	1st Bower	26	3	21	26	7	2	0	26	4	0	Hook with 12 ft. chain
33374	2nd "	25	3	7	25	10	1	0	25	4	0	Hook with 12 ft. chain
33170	3rd "	22	2	14	22	16	3	11	22	2	0	Hook with 12 ft. chain
	Collective weight	75	1	14	75	10	0	0	75	10	0	Hook with 12 ft. chain
19216	Stream	7	1	0	7	9	9	1	7	1	0	Ring
19215	Kedge	3	1	20	3	11	0	0	3	2	0	Ring

CHAIN CABLES.										HAWERS AND WARPS.									
Number of Certificate.	Fathoms.	Size.	Test per Certificate.	WEIGHT OF CHAIN CABLE.		Fathoms.	Size.	Test per Certificate.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size per Table 22.			
				Supplied.	Per Table 22.														
17954	105	1 1/2	402.55	121.0	121.0	105	1 1/2	402.55	121.0	121.0	105	1 1/2	402.55	121.0	121.0	105			
17955	105	1 1/2	402.55	121.0	121.0	105	1 1/2	402.55	121.0	121.0	105	1 1/2	402.55	121.0	121.0	105			
	210	3 1/2	242.08	242.08	242.08	210	3 1/2	242.08	242.08	242.08	210	3 1/2	242.08	242.08	242.08	210			

Boats. *Two life boats, one cutter & one dingy*

Pumps, Number *7* Diameter of Barrel *5* State whether they are in efficient working order *yes*

Windlass is *6 inch Chapman Patent* Capstan *---*

Engine Room Skylights. How constructed? *Iron & tin casing*

What arrangements for deadlights in bad weather? *Impervious covers.*

Coal Bunker Openings. How constructed? *Hatchway* How are lids secured? *Hatches* Height above deck? *7 ft.*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *three scuppers & three freeing ports 2' 9" x 1' 9" on each side*

Ceiling in Holds, thickness and material *2 1/2 in. p.p. on 2 runners* Ceiling 'tween Decks, thickness and material *---*

Cargo Hatchways. How formed? *Plates & angles* Hatches. If strong and efficient? *yes*

State size No. 1 Hatch (Forward) *23' 6" x 14' 0"* No. 2 Hatch *23' 6" x 14' 0"* No. 3 Hatch *23' 6" x 14' 0"* No. 4 Hatch *23' 6" x 14' 0"*

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *two web plates shifting beams and three cross*

for and after to each hatch *---* No. of Breasthooks *---* No. of Crutches *2*

Bulwarks, height above deck and description *4 ft. - Grotto (steel plate)* Main Rail, material and size *Bull rope 6 x 5 1/2*

The above is a correct description. *Wm. D. & Co.* Surveyor's Signature *H. A. and*

Builder's Signature (here only) *Wm. D. & Co.* Surveyor to Lloyd's Register of British and Foreign Shipping.

Correspondence. State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with the case) *M. 14/12/97*

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* 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 facing surfaces? *yes* Do any rivets break into or through the seams or butts of the plating? *no*

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

Have all the upper and weather decks been tested as required by the Rules (Sec. 23, par 24)? *yes* State results of tests *good*

Have all the gutterways been tested as required by the Rules (Sec. 23, par 25)? *yes* State results of tests *good*

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

*This is a well built steamer built in accordance with the approved plans and surveys, bottom of the above date and in general conformity with the Rules. The workmanship is good throughout. An installation of electric lighting is fitted in vessel.*

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

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *76.75* ft., R.Q.D. or Break *76.75* ft., Bridge Dk. *22* ft., F'castle *27* 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 *the R.Q.D. is joined to the B.D.*

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) *One steel deck, no tiers of beams*

Official No. *---*; Signal Letters *---*

How are the surfaces preserved from oxidation? Inside *Salt and cement & paint* Outside *Paint*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors *cellular*

Where fitted.	*Length. Feet.	Water Capacity. Tons.	Where fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	50.5	80	Fore peak tank,	18.75	66
Double bottom, under Engines and Boilers,			After peak tank,		
Double bottom, if under Engines only,			Midship deep tank,		
Double bottom, if under Boilers only,			Other tanks, if fitted,		
Double bottom, forward,	95.5	176	(If necessary, furnish further information by sketch.)		

\* The wells are not to be included in the lengths of the tanks. State whether the above have been tested as required by the Rules *yes*

Order for Special Survey No. *3145*

Date *16.12.97*

No. *24* in builder's yard

DATES OF SURVEYS held while building *1897- Feb. 14, 16, 17, 20, Jan. 19, 20, 24, 25, 26, 31, Feb. 4, 11, 12, 14, 15, 16, 21, 22, 23, 24, 26, March 1, 2, 3, 7, 8, 9, 11, 14, 15, 21, 22, 23, 24, 29, 31, April 1, 5, 7, 14, 19, 19, 21, 25, 29, May 2, 4, 6, 10, 11, 12, 16, 19, 23, 24, 25, 27, 28, 31, June 10, 15, 17, 20, 21, 24, 27, 28, 29, July 1, 4, 6, 12, 14, 25, 27, 28, 30, August 1, 2, 3, 4, 5, 12, 14, 17, 18, 22, 23, 24*

Total No. of Visits *89*

The amount of Entry Fee *4* : : : Fees applied for, *31.8.1898*

Special *52* : : : Received by me, *18.9.18*

Certificate *---*

Travelling Expenses, if any *---*

State whether the Vessel has been built under Special Survey *yes*

I am of opinion this Vessel should be Classed *100 A.1. Steel. Full sec.*

With, or without Freeboard, as condition of Class

Committee's Minute *TUES. 6 SEP 1898*

Character assigned *100A1 Steel*

*at RCP + LMCB. 98 100A1 Steel + Web frames*

*Clear light Wall sk.*

*H. A. and*

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