

for 2 Dks, R.Q.Dk.,  
and Pt. Awng. Dk.

# IRON OR STEEL STEAMER.

SAT. 3 OCT 1896  
Received at London Office.

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

Date of completion of Report *29<sup>th</sup> September 1896* Port of *Sunderland*  
No. *18455* Survey held at *Sunderland* Date, First Survey *2 March 96* Last Survey *29<sup>th</sup> September 1896*  
On the *Steel Steamer HARBORE* YARD No. *192* Rig *Schooner (2 masts)*

TONNAGE under  
Tonnage Deck... *939.95*  
Do. of Poop *50.33*  
Do. of Raised Qr. *69.30*  
Do. of Break... *103.25*  
Do. of Bridge House *28.09*  
Do. of Fore-cabin *3.66*  
Do. of House on Deck (CHART) *83.51*  
Do. of excess of Hatchways  
Do. above Crown of  
Engine Room... *1278.29*  
Gross Tonnage *56.30*  
Less Space  
Less at Crown of  
Engine Room... *1221.99*  
Tonnage for Fees...  
Engine Room *409.05*  
Navigation Spaces *27.80* *436.85*  
Net Tonnage *785.14*  
Tonnage on Beam...

ONE OR TWO DECKED VESSEL.

CLASS *100 A1.*

Half Breadth (moulded) *17.0*  
Depth from upper part of Keel to top of Main Deck Bms. *17.95*  
Girth of Half Midship Frame (as per Rule) *31.16*  
1st Number *66.11*  
Length *233.25*  
2nd Number *15420*  
Proportions—Breadths to Length *6.8*  
Depths to Length—Main Deck to top of Keel... *12.9*  
Destined Voyage *London*

Master *A Himsley*  
Year of appointment *(1) As master in service of owner of present vessel:—1896*  
Built at *Sunderland*  
When built *1896* Launched *24 August*  
By whom built *S.P. Austin & Son*  
Owners *J & C Harrison*  
Managers  
(Where necessary to be entered in Reg. Book).  
Residence  
Port belonging to *London*  
Surveyed while Building, Afloat, or in Dry Dock

Length on Deck *233* Feet. *3* Inches. BREADTH—Moulded... *34* Feet. *0* Inches. DEPTH—Top of Floors to Main Deck Beams. *14* Feet. *5* Inches. Power of Engines *120* Horse. No. of Decks with Flat laid *One* No. of Tiers of Beams *One & web frame*  
Dimensions of Ship per Register, Length, *235.15* breadth, *34.1* depth, *14.35* Moulded Depth, ft. *14* ins. *3* Round of Beam *8 1/2* inches.

FRAMING.				FORGINGS AND CASTINGS.			
	Inches in Ship.	Inches in Ship.	16ths or 20ths per Rule Or as Approved.		Inches in Ship.	Inches in Ship.	16ths or 20ths per Rule Or as Approved.
ME, Angles, <i>7</i> , E or L Bars, for $\frac{1}{2}$ length amidships	<i>5 1/2</i>	<i>3</i>	<i>8</i>	KEEL, Bar or Side Plates depth and thickness	<i>7 1/2</i>	<i>2 3/4</i>	<i>8</i>
for $\frac{1}{2}$ at each end	<i>5 1/2</i>	<i>3</i>	<i>7</i>	STEM, moulding and thickness	<i>8</i>	<i>4 3/4</i>	<i>8</i>
in way of Double Bottoms at Solid Floors	<i>3</i>	<i>3</i>	<i>7</i>	STERN-POST for Rudder do. do.	<i>8</i>	<i>4 3/4</i>	<i>8</i>
at intermdt. Bkts.	<i>4</i>	<i>3</i>	<i>7</i>	for Propeller	<i>8</i>	<i>4 3/4</i>	<i>8</i>
ance of Frames from moulding edge to building edge, all fore and aft	<i>23</i>	<i>23</i>	<i>23</i>	MAIN PIECE of Rudder, diameter at head...	<i>5 3/4</i>	<i>5 3/4</i>	<i>5 3/4</i>
TURNED FRAME, Angles <i>ON FLOORS</i>	<i>3</i>	<i>3</i>	<i>7</i>	do. at heel...	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>
EP FRAMING, depth of girder	<i>41</i>	<i>6 1/6</i>	<i>41</i>	RUDDER, how constructed <i>Forged and plated</i>			
ORS, depth and thickness of Floor Plate at mid-line for $\frac{1}{2}$ length amidships	<i>41</i>	<i>9</i>	<i>41</i>	Can the Rudder be unshipped afloat? <i>yes</i>			
in way of Engines and Boilers	<i>4</i>	<i>4</i>	<i>8</i>	KEELSONS AND STRINGERS.			
thickness at the ends of vessel	<i>4 1/2</i>	<i>4</i>	<i>9</i>	CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate	<i>72</i>	<i>10</i>	<i>72</i>
depth at $\frac{1}{2}$ the half breadth, as per Rule	<i>Three</i>	<i>6 1/6</i>	<i>Three</i>	“ Rider Plate	<i>4 1/2</i>	<i>4 1/2</i>	<i>9</i>
height extended at the Bilges	<i>3</i>	<i>3</i>	<i>7</i>	“ Bulb Plate to Intercoastal Keelson	<i>3 1/2</i>	<i>3</i>	<i>6</i>
ORS & BRACKETS, in Cell Dble Bottoms	<i>41</i>	<i>9</i>	<i>41</i>	“ Horizontal Plates on Floors	<i>9</i>	<i>6</i>	<i>9</i>
Distance apart	<i>4</i>	<i>4</i>	<i>8</i>	“ Angles	<i>3 1/2</i>	<i>3</i>	<i>6</i>
NTRE GIRDER, in Double Bottom, depth and thickness	<i>4 1/2</i>	<i>4</i>	<i>9</i>	SIDE KEELSON, Angles	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Angles, Top	<i>4 1/2</i>	<i>4</i>	<i>9</i>	“ Bulb or Plate above floors for length	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Bottom	<i>4 1/2</i>	<i>4</i>	<i>9</i>	Intercoastal Plate for	<i>3 1/2</i>	<i>3</i>	<i>6</i>
E GIRDERS, number and thickness	<i>Three</i>	<i>6 1/6</i>	<i>Three</i>	Attached to outside plating with Angle	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Angles	<i>3</i>	<i>3</i>	<i>7</i>	BILGE KEELSON, Angles	<i>3 1/2</i>	<i>3</i>	<i>6</i>
RGIN PLATE, depth (exclusive of flange) and thickness	<i>27</i>	<i>7</i>	<i>27</i>	“ Bulb or Plate above floors for length	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Angles	<i>3 1/2</i>	<i>3 1/2</i>	<i>8</i>	Intercoastal Plate for	<i>3 1/2</i>	<i>3</i>	<i>6</i>
ER BOTTOM PLATING, breadth and thickness of Middle Line Strake	<i>35</i>	<i>8 1/6</i>	<i>35</i>	Attached to outside plating with Angle	<i>3 1/2</i>	<i>3</i>	<i>6</i>
thickness in Engine and Boiler space	<i>7/16</i>	<i>8 1/6</i>	<i>7/16</i>	BILGE STRINGER Angles	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Remainder in Holds	<i>5 1/2</i>	<i>3</i>	<i>8</i>	“ Bulb Plate for length	<i>3 1/2</i>	<i>3</i>	<i>6</i>
AMS, Main and Raised Quarter Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	<i>5 1/2</i>	<i>3</i>	<i>8</i>	Intercoastal Plate for	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Angles on Upper Edge	<i>23</i>	<i>23</i>	<i>23</i>	Attached to outside plating with Angle	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Average space	<i>23</i>	<i>23</i>	<i>23</i>	SIDE STRINGER Angles	<i>3 1/2</i>	<i>3</i>	<i>6</i>
AMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb	<i>5 1/2</i>	<i>3</i>	<i>8</i>	“ Bulb or Intercoastal Plate for length	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Angles on Upper Edge	<i>23</i>	<i>23</i>	<i>23</i>	Attached to outside plating with Angle	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Average space	<i>23</i>	<i>23</i>	<i>23</i>	Main and Raised Quarter Deck Stringer Plate, breadth and thickness	<i>72</i>	<i>10</i>	<i>72</i>
AMS, Hold, Plate or Tee Bulb	<i>5 1/2</i>	<i>3</i>	<i>8</i>	Angle on ditto	<i>4 1/2</i>	<i>4 1/2</i>	<i>9</i>
Angles on Upper Edge	<i>23</i>	<i>23</i>	<i>23</i>	Tie Plates fore & aft, outside Hatchways	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Average space	<i>23</i>	<i>23</i>	<i>23</i>	Diagonal Tie Plates on Bms. No. of Pairs	<i>3 1/2</i>	<i>3</i>	<i>6</i>
AMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	<i>5 1/2</i>	<i>3</i>	<i>8</i>	Main Dk* Iron or Steel for whole lng.	<i>6 1/6</i>	<i>6 1/6</i>	<i>6 1/6</i>
Angles on Upper Edge	<i>23</i>	<i>23</i>	<i>23</i>	R. Q. Dk* Iron or Steel for whole lng.	<i>6 1/6</i>	<i>6 1/6</i>	<i>6 1/6</i>
Average space	<i>23</i>	<i>23</i>	<i>23</i>	Wood Deck, Material & thickness	<i>5 1/6</i>	<i>5 1/6</i>	<i>5 1/6</i>
AMS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb	<i>5</i>	<i>3</i>	<i>6</i>	Lower Deck Stringer Plate, breadth and thickness	<i>21</i>	<i>4</i>	<i>21</i>
Angles on Upper Edge	<i>23</i>	<i>23</i>	<i>23</i>	Angles on ditto, No.	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Average space	<i>23</i>	<i>23</i>	<i>23</i>	Tie Plates, outside Hatchways	<i>9</i>	<i>6</i>	<i>9</i>
AMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	<i>4 1/2</i>	<i>3</i>	<i>6</i>	Deck* Material and thickness	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Angles on Upper Edge	<i>23</i>	<i>23</i>	<i>23</i>	Hold Stringer Plate	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Average space	<i>23</i>	<i>23</i>	<i>23</i>	Angles on ditto, No.	<i>3 1/2</i>	<i>3</i>	<i>6</i>
LLARS, In 'tween Decks, Size and Spacing	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Poop Deck Stringer Plate, breadth & thickness	<i>21</i>	<i>4</i>	<i>21</i>
Hold	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Angle on ditto	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Quarter, 'tween Dks.,	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Tie Plates	<i>9</i>	<i>6</i>	<i>9</i>
In Hold	<i>3 1/2</i>	<i>3 1/2</i>	<i>3 1/2</i>	Deck, Material and thickness	<i>3 1/2</i>	<i>3</i>	<i>6</i>
WEB FRAMES, In Fore Body, No. and Spacing	<i>6</i>	<i>6</i>	<i>6</i>	Bridge Deck Stringer Plate, brdth & thickness	<i>30</i>	<i>6 1/6</i>	<i>30</i>
Brdth. & Thickness	<i>15</i>	<i>7</i>	<i>15</i>	Angle on ditto	<i>3 1/2</i>	<i>3</i>	<i>6</i>
No. of Side Stringers	<i>Two</i>	<i>Two</i>	<i>Two</i>	Tie Plates	<i>9</i>	<i>6</i>	<i>9</i>
WEB FRAMES, In E. & B. Space, No. & Spacing	<i>Three</i>	<i>Three</i>	<i>Three</i>	Deck, Material and thickness	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Brdth. & Thickness	<i>15</i>	<i>7</i>	<i>15</i>	Forecastle Deck Stringer Plate, brdth & thcknss	<i>3 1/2</i>	<i>3</i>	<i>6</i>
No. of Side Stringers	<i>Three</i>	<i>Three</i>	<i>Three</i>	Angle on ditto	<i>3 1/2</i>	<i>3</i>	<i>6</i>
Size of Angles or Tee Bars to Web Frames	<i>6</i>	<i>3 1/2</i>	<i>8 1/6</i>	Tie Plates	<i>9</i>	<i>6</i>	<i>9</i>
BRACKET PLATES to Stringers between Web Frames, Depth and Thickness	<i>6</i>	<i>3 1/2</i>	<i>8 1/6</i>	Deck, Material and thickness	<i>3 1/2</i>	<i>3</i>	<i>6</i>



PLATING.										RIVETING.													
AS IN SHIP.					PER RULE OR AS APPROVED.					EDGES.					BUTTS.								
STRAKES.		AMIDSHIP.		FORWARD.		AFT.		AMIDSHIP.		Single or Double.		Breadth of Lap.		RIVETS.		Double or Treble and for what Length.		RIVETS.		STRAPS.		IF LAPED.	
Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.
FLAT PLATE KEEL	36	14	11	11	36	14	11	36	14	Double	5 1/2	7/8	3/4	2 1/2	1 1/2	5 1/2	19 1/2	16	-	-	-	-	-
(If Bar Keel, state Riveting)										do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
GARBOARD OR A STRAKE	41	11	10	10	41	11	10	41	11	do.	4 1/2	3/4	3/4	do.	3/4	3 1/2	-	-	7 1/2	full	do.	-	
State actual thickness in way of Double Bottom.										do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
B	54	9	8	10	54	9	10	54	9	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
C	46	10	8	9	46	10	8	46	10	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
D	49	10	8	8	49	10	8	49	10	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
E	39	11	8	8	39	11	8	39	11	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
F	54	9	8	8	54	9	8	54	9	do.	4 1/2	3/4	3/4	do.	3/4	3 1/2	-	-	7 1/2	full	do.	-	
G	46	10	8	8	46	10	8	46	10	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
H	51	10	8	8	51	10	8	51	10	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
J	38	13	9	9	38	13	9	38	13	do.	5 1/2	7/8	3/4	do.	7/8	3 1/2	-	-	7 1/2	full	do.	-	
K																							
L																							
M																							
N																							
O																							
P																							
DOUBLING OF FLAT PLATE KEEL																							
Length of Bilges																							
Length of Sheerstrakes																							
Thickness of Strake below																							
POOP SIDES																							
RAISED QUARTER DECK SIDES																							
BRIDGE SIDES																							
FORECASTLE SIDES																							
LENGTHS OF PLATING																							
Seven spaces of frames																							
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.												Main Stringer Plate											
Siemens-Martin Steel												Butts, treble riveted for length of hatchways amidship.											
Plating by Corbett & Co. Bars by Corbett & Co.												Straps, single, double or overlapped for whole length amidship											
Iron plates by Holston												Butts of Bilge & Side Stringers, and Tie Plates, treble or double riveted?											
Iron bars by S. J. Gysack and W. Whitwell & Co.												Inner Bottom Plating, riveting of Edges											
												Single											
												Butts of Bilge in L & B space											
												riveted.											
												Centre Girder Butts, treble riveted.											
												Frames, riveted through Plates with											
												7/8 in. Rivets, about											
												6 1/2 apart.											
												Rivets, state whether of Iron or Steel											
												Iron											
FRAMES extend in one length from middle line to margin plate, thence to gunwale																							
REVERSED FRAMES on floors and frames extend from middle line to margin plate																							
MASTS, SPARS, &c.																							
Material. Total length. At Partners. Head. Hoards. Head. No. of Plates in round. Number. Size. Name. Riveting. Butts.																							
LOWER MASTS																							
Fore Mast. Steel. 54' 3". 16 x 9/16. 15 x 9/16. 11 x 9/16. Two. Single. Treble.																							
Main Mast. 49' 9". 16 x 9/16. 15 x 9/16. 11 x 9/16. Two. Single. Treble.																							
Mizen Mast. 49' 9". 16 x 9/16. 15 x 9/16. 11 x 9/16. Two. Single. Treble.																							
Bowsprit																							
Topmasts, and Remainder of Spars																							
Rigging, Material and Size, Shrouds																							
Sails, One Suit of Schooner																							
Sails and the following spare sails																							
Stays 3 1/2"																							
EQUIPMENT No. 16681 LETTER N																							
TONNAGE FOR TRAWLERS																							
ANCHORS.																							
U.Dk.																							
Number of Certificate. Anchors. Weight, Ex Stock. Weight of Stock. Test, per Certificate. Weight Reg. by Rule. Description of Anchor. Makers. Where and when tested and Superintended.																							
29929 1st Bower																							
29880 2nd "																							
29887 3rd "																							
30033 Stream "																							
29936 Kedge "																							
2nd Kedge "																							
CHAIN CABLES.																							
HAWERS AND WARPS.																							
Number of Certificate. Fathoms. Size. Test per Certificate. Weight of Chain Cable. Fathoms and Size per Rule. Description. Makers of Cables. When and where tested, and Superintended. Material. Fathoms. Size. Breaking Test of Steel Wire. Fathoms and Size per Rule.																							
12344 212 1 1/2 55 1/2 23 1/2 242 3-7 242 0-5 210 1 1/2 Steel link of Harthorn & Co. RMC 1/4 H. J. Melford																							
TOWLINE																							
HAWSER																							
WARP																							
Iron Stream Chain or Steel Wire																							
Boats																							
Pumps, Number																							
Windlass is																							
Engine Room Skylights																							
What arrangements for deadlights in bad weather?																							
Coal Bunker Openings																							
Number of Scuppers, and number and dimensions of Freeing Ports, &c.																							
Ceiling in Holds, thickness and material																							
Cargo Hatchways																							
State size No. 1 Hatch (Forward)																							
No. 2 Hatch																							
No. 3 Hatch																							
No. 4 Hatch																							
Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch																							
and one strong beam in No. 2																							
Two webs in No. 3																							
No. of Breasthooks																							
No. of Crutches																							
Bulwarks, height above deck and description																							
The above is a correct description.																							
Builder's Signature																							
Surveyor's Signature																							

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with the case)

(M) 17<sup>th</sup> and 31<sup>st</sup> March (E) 26<sup>th</sup> August 1896.

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.

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

This steel screw steamer has been built in accordance with the approved plans, the Secretary's letter dated as above stated and in other respects in conformity with the Rules. The workmanship is good throughout. The decks and waterways have been tested by water and the efficiency of the hand pumps and watertight doors ascertained.

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 the plating? a very few

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

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop. 26 ft., R.Q.D. or Break. 56 ft., Bridge Dk. 46 ft., F'castle 25 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 poop and bridge are joined to raised quarter deck.

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 D<sup>th</sup> (IRON) 1 tier of beams and web-frames.

Official No. ; Signal Letters

How are the surfaces preserved from oxidation? Inside Portland cement / paint Outside Paint

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

Where fitted.	Length.	Water Capacity.	Where fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	54' 3"	114	Fore peak tank,	15' 4"	22
Double bottom, forward,	96' 0"	174	After peak tank,	15' 4"	46
Double bottom, under Engines and Boilers, excl. well	34' 6"	79	Midship deep tank,	-	-
Double bottom, if under Engines only,	-	-	Other tanks, if fitted,	-	-
Double bottom, if under Boilers only,	-	-	(If necessary, furnish further information by sketch.)	-	-

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

Order for Special Survey No. 14022	1st. On the several parts of the frame, when in place, and before the plating was wrought	21 April 9/11/14/30/11/15/20/21/22/29/June 28/12/16
Date 14 Apr 96	2nd. On the plating during the process of riveting	21 April 9/11/14/30/11/15/20/21/22/29/June 28/12/16
Order for Ordinary Survey No. 1	3rd. When the beams were in and fastened and before the decks were laid	18 26 30 July 8/14/16 20 25 31 August 6/7/10/12/19/21 24/28
Date	4th. When the ship was complete, and before the plating was finally coated or cemented	Sept. 1/4 8/9 15 18 21 23 24 25 28 29
No. 192 in builder's yard	5th. After the ship was launched and equipped	Total No. of Visits 51

The amount of Entry Fee 4 : 0 : 0  
Special 55 : 11 : 0  
Certificate £  
Travelling Expenses, if any £

Fees applied for  
10 Oct 1896  
Received by me,  
6.10.1896

\* Certificate to be sent to

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

With, or without Freeboard, as condition of Class

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

Committee's Minute

Character assigned

100 A1 Steel  
+ 2 m/c 10, 96 1 Hk (Iron) + Web frames  
Well sk

TUES. 6 OCT 1896