

IRON SHIPS.

9422 Survey held at Sunderland Date August 29th 18 68
 the Screw Steamer "Austin Friars" Master R. Newcomb
 Tonnage under deck 680.68 Built at Sunderland When built 1868 Launched 1st Aug^r 1868
 "Berth" or spar deck 351.87 By whom built Mr. James Laing Owners R. Young & Co.
 "Stow room" 11.83 Port belonging to Wisbeach Destined Voyage Mediterranean
 "to of engine room" 331.61 Gross Tonnage 1036.27
 "to of crew space" 38.42
 "for Register tonnage" 666.24

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

Feet.		Inches.		Feet.		Inches.		Feet.		Inches.		Horse.		No. of Decks	
Depth from top of Upper Deck Beam to top of Floor		16		3		3 1/2		Power of Engines		99		No. of Decks		Two	
Dimensions of Ship per Register, length 210 breadth 30.3 depth 16.6															
Inches in Ship.		Inches required per Rule.		Inches in Ship.		Inches required per Rule.		Inches in Ship.		Inches required per Rule.		16ths in Ship.		16ths required per Rule.	
7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4	
if bar iron, depth and thickness		if plate iron, breadth and thickness		if bar iron, moulding and thickness		if plate iron, breadth and thickness		if bar iron, moulding and thickness		if plate iron, breadth and thickness		if bar iron, moulding and thickness		if plate iron, breadth and thickness	
7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4		7 x 2 3/4	
9 1/2 x 4 1/2		21 ins		21 ins		21 ins		21 ins		21 ins		21 ins		21 ins	
Inches. In Ship.		Inches. In Ship.		Inches. In Ship.		Inches. In Ship.		Inches. In Ship.		Inches. In Ship.		Inches. In Ship.		Inches. In Ship.	
4 3 7		4 3 7		4 3 7		4 3 7		4 3 7		4 3 7		4 3 7		4 3 7	
Reversed Iron, to every frame		Reversed Iron, to every frame		Reversed Iron, to every frame		Reversed Iron, to every frame		Reversed Iron, to every frame		Reversed Iron, to every frame		Reversed Iron, to every frame		Reversed Iron, to every frame	
and or every alternate frame		and or every alternate frame		and or every alternate frame		and or every alternate frame		and or every alternate frame		and or every alternate frame		and or every alternate frame		and or every alternate frame	
depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line		depth and thickness of Floor Plate at mid line	
- 22 8		- 22 8		- 22 8		- 22 8		- 22 8		- 22 8		- 22 8		- 22 8	
Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson		Ditto ditto at Bilge Keelson	
- 9 8		- 9 8		- 9 8		- 9 8		- 9 8		- 9 8		- 9 8		- 9 8	
Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate		Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate	
3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6	
Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron		Deck (No. 48) double Angle Iron, Plate, Tee, or Bulb Iron	
- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8	
,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge	
3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6	
,, average space between		,, average space between		,, average space between		,, average space between		,, average space between		,, average space between		,, average space between		,, average space between	
2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2	
Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron		Hold, or Lower Deck (No. 32) double Angle, Tee, Plate, or Bulb Iron	
- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8	
,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge		,, double or single Angle Iron, on Upper edge	
3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6		3 2 3/4 6	
,, average space between		,, average space between		,, average space between		,, average space between		,, average space between		,, average space between		,, average space between		,, average space between	
2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2		2 1/2 x 4 1/2	
Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron		Paddle, sided and moulded, thickness of Plate size of Angle Iron	
- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
Engine		Engine		Engine		Engine		Engine		Engine		Engine		Engine	
- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors		on, single or double plate, box, or intercostal plating upon Floors	
- 15 12		- 15 12		- 15 12		- 15 12		- 15 12		- 15 12		- 15 12		- 15 12	
Size of Plates		Size of Plates		Size of Plates		Size of Plates		Size of Plates		Size of Plates		Size of Plates		Size of Plates	
5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9	
Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom		Size of Angle Irons Double Top and Bottom	
5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9	
Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's		Side, single or double, plate, box, or intercostal with Double Angle Iron's	
5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9	
Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.		Bilge (No. one) at each Bilge, single, or double, plate, or box A.L.	
5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9		5 4 1/2 9	
with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.		with Bulb Plate Between Decks, material or, if none, in what manner compensated for.	
- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8		- 7 1/2 8	
Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness		Plates in Garboard Strakes, breadth and thickness	
36 10 30 10		36 10 30 10		36 10 30 10		36 10 30 10		36 10 30 10		36 10 30 10		36 10 30 10		36 10 30 10	
Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..		Ditto from Garboard to upper part of Bilges..	
- 9 - 9		- 9 - 9		- 9 - 9		- 9 - 9		- 9 - 9		- 9 - 9		- 9 - 9		- 9 - 9	
,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		,, from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	
- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8	
,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake		,, from 3/4ths depth of Hold to lower edge of Sheerstrake	
- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8		- 8 - 8	
,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness		,, Sheerstrake, breadth and thickness	
37 1/2 10 30 11		37 1/2 10 30 11		37 1/2 10 30 11		37 1/2 10 30 11		37 1/2 10 30 11		37 1/2 10 30 11		37 1/2 10 30 11		37 1/2 10 30 11	
Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness		Butt Straps to outside plating, breadth and thickness	
9 8 8 8		9 8 8 8		9 8 8 8		9 8 8 8		9 8 8 8		9 8 8 8		9 8 8 8		9 8 8 8	
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	
4 3 9 30 10		4 3 9 30 10		4 3 9 30 10		4 3 9 30 10		4 3 9 30 10		4 3 9 30 10		4 3 9 30 10		4 3 9 30 10	
Angle Iron on ditto		Angle Iron on ditto		Angle Iron on ditto		Angle Iron on ditto		Angle Iron on ditto		Angle Iron on ditto		Angle Iron on ditto		Angle Iron on ditto	
4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x		4 1/2 x 3 1/2 x 7 4 1/2 x 3 1/2 x	
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	
11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8	
Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto		Diagonal Tie Plates on ditto	
11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8		11 8 11 8	
Planksheer, materials and scantlings		Planksheer, materials and scantlings		Planksheer, materials and scantlings		Planksheer, materials and scantlings		Planksheer, materials and scantlings		Planksheer, materials and scantlings		Planksheer, materials and scantlings		Planksheer, materials and scantlings	
Gutter Gunwale		Gutter Gunwale		Gutter Gunwale		Gutter Gunwale		Gutter Gunwale		Gutter Gunwale		Gutter Gunwale		Gutter Gunwale	
Waterway ditto ditto		Waterway ditto ditto		Waterway ditto ditto		Waterway ditto ditto		Waterway ditto ditto		Waterway ditto ditto		Waterway ditto ditto		Waterway ditto ditto	
Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material		Flat of Upper Deck, thickness and material	
Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3		Spar deck 3 1/2, Main D. 3	
,, how fastened to Beams		,, how fastened to Beams		,, how fastened to Beams		,, how fastened to Beams		,, how fastened to Beams		,, how fastened to Beams		,, how fastened to Beams		,, how fastened to Beams	
Iron screw bolts & nuts		Iron screw bolts & nuts		Iron screw bolts & nuts		Iron screw bolts & nuts		Iron screw bolts & nuts		Iron screw bolts & nuts		Iron screw bolts & nuts		Iron screw bolts & nuts	
Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material		Ceiling betwixt Decks and in Hold, thickness and material	
2 1/2 red-pine		2 1/2 red-pine		2 1/2 red-pine		2 1/2 red-pine		2 1/2 red-pine		2 1/2 red-pine		2 1/2 red-pine		2 1/2 red-pine	
Clamps or Spirketting ditto		Clamps or Spirketting ditto		Clamps or Spirketting ditto		Clamps or Spirketting ditto		Clamps or Spirketting ditto		Clamps or Spirketting ditto		Clamps or Spirketting ditto		Clamps or Spirketting ditto	
- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	
22 1/2 8 22 1/2 8		22 1/2 8 22 1/2 8		22 1/2 8 22											

heads, and Hawse Timbers plate & angles " size of vertical angle irons 3 x 3/4 x 6/16 and their distance apart 30 in
frames extend in one length from Keel to Spar deck stringer rivetted through plates with (3/4 in.) rivets, about (6 in) apart.
verse angle irons ^{^ and frames} on the floors extend ~~in one length~~ across the middle line from below main deck stringer angle iron
" " " ^{every} on the frames " " " from and to the Spar deck stringer on alternate frames

how are the various lengths of plates or angle irons connected? with butt straps

Garboard, double ~~or~~ ^{1 with 1 in. web} rivetted to keel, double ~~or~~ at upper edge, with rivets ($\frac{3}{4}$ ins.) diameter, averaging (3 in.) apart.

Edges from Garboards to upper part of bilge, worked clencher, double ~~or single~~ rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (3 in.) apart.

Butts from Keel to turn of bilge, worked carvel with butt straps ($\frac{9 \times 10}{16}$) thick, double ~~or~~ single rivetted; with rivets ($\frac{3}{4}$ in.) diameter, averaging (3 ins.) apart. Do the butt straps lap over and rivet through the lands of the strake below? *No*

Edges from bilge to sheerstrake, worked ~~carvel with a lining piece () thick, or~~ ^{and} clencher, double ~~or~~ single rivetted; with rivets ($\frac{3}{4}$ in.) diameter.

averaging (3 in.) apart. Do the butt straps lap over and rivet through the lands of the strake below? No

Edges of Sheerstrake, double ~~or single~~ rivetted? At upper edge *and* " At lower edge *double rivetted*

Butts from bilge to planksheers, worked carvel with butt straps ($\frac{60}{10}$) thick, double ~~or~~ single rivetted; with rivets ($\frac{3}{4}$ in.) diameter,

averaging (3 ins.) apart. Breadth of laps in double rivetting ($4\frac{1}{2}$) Breadth of laps in single rivetting ($2\frac{3}{4}$).

Straps of Keelsons, Stringer and Tie Plates, double ~~or single~~ rivetted?

sheer, how secured to the plating of the sides

way „ „ planksheer and to the Beams { if necessary. }

Beams, how secured to the side? With knee plates, rivetted to main frames and stringer plates

or Lower Deck ditto with knee plates, rivetted to main frames & stringer plates

ble	"	"	-	-	-	-	-	-	No. of breasthooks	<i>five</i>	crutches	<i>five</i>
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at description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?

Manufacturers name or trade mark Palmer & Co., and the styling by Deane, Hutchinson & Co.

We certify that the above is a correct description of the several particulars therein given.

Owner's Signature James Leung Surveyor's Signature James Leung

1822 VII/2 - 046



6496 Jan

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? Yes
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
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid with single pieces
Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes
Are there any rivets which either break into or have been put through the seams or butts of the plating? A very few

Her Masts, Bowsprit, Yards, &c., are in good condition, and sufficient in size and length. (If they are of Iron or Steel give the scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of rivetting, quality of Materials, and if stamped with Maker's name.

N ^o .	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test as per Certificate.	Wt. req'd per Rule.	Test req'd per Rule.
1 Complete dunt and	Fore Sails,	Chain	270	1 7/16	46 1/2	1 8/16	40 1/2	Bowers	1	21.1.11	21.18.0.0	21.0.0	21.12.0
	Fore Top Sails,	This chain has been tested to breaking strain, which showed a margin of 140 p. cent above strain required for 1 7/16 in chain.											
	Fore Topmast Stay Sails	Hempen Stream Cable	90	6					1	21.1.0	21.16.1.5	21.0.0	21.12.0
	Main Sails,	Hawser Chain...	90	15 1/16				Stream	1	9.2.0			
	Main Top Sails,	Towlines	80	8									
		Warp	90	5				Kedges	2	4.3.16			
		All of <u>good</u> quality.	90	4						2.1.8			
Her Standing and Running Riggings <u>Wm & Henry</u> sufficient in size and <u>good</u> in quality.													
She has <u>One</u> <u>Life</u> Boat and <u>two others</u>													
The present state of the Windlass is <u>firm</u> Capstan <u>5</u> & <u>Winch</u> and Rudder <u>&</u> Pumps <u>New & good</u>													

Order for Special Survey	DATES of	1st.	On the several parts of the frame, when in place, and before the plating was wrought	<u>Built under</u>
No. _____	Surveys held	2nd.	On the plating during the progress of rivetting	<u>Ordinary Survey.</u>
Date _____	while building	3rd.	When the beams were in and fastened, and before the decks were laid	<u>1868 March 6, 13, 17, 23, 26, Apr. 30, May 6, 9, 15, 21, 23, 28, June 5, 12</u>
Order for Ordinary Survey	as per	4th.	When the ship was complete, and before the plating was finally coated	<u>23, 26, July 6, Aug. 7, 10, 13, 29</u>
No. _____	Section 18.	5th.	After the ship was launched	<u>"</u>
Date _____				
State if she has a Spar Deck <u>Yes</u> Poop _____ or Forecastle _____				

General Remarks,
The Spar deck beams are of Bulb iron $6\frac{1}{2} \times \frac{5}{16}$ spaced at every alternate frame, with double angle iron on the upper edge $2\frac{1}{2} \times 2\frac{1}{2} \times \frac{5}{16}$, with turned down ends, & rivetted to Main frames & Stringer plates; The Stringer plates on beam ends are $30 \times \frac{7}{16}$ in, and angle iron $3\frac{1}{2} \times 3\frac{1}{2} \times \frac{7}{16}$. The fore & aft, and diagonal tie plates are $10 \times \frac{5}{16}$. The Sheer strake is $4\frac{3}{8} \times \frac{8}{16}$ and the strake below $\frac{7}{16}$ in.
The thickness of the main and spar decks, are reversed, vizt. the spar deck being $3\frac{1}{2}$, and the main deck 3 in thick; The side intercostal plates are rivetted with angle iron through outside plating, at the bottom, and between double angle irons on of floor plates.
This vessel is constructed in the same manner as No. 90 report No. 9384, please see sketch attached thereto, which was submitted by the Builder, W. Laing, and received the sanction of the Committee.
During her whole construction, this vessel was surveyed by the late Mr. Lawrence.
The testing certificate of Anchors & Chain have been produced, issued from the Mean testing Machine & signed Mr. John Hartness.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement to Bilges, & red-lead above
Ditto ditto Outside 3 Coats of Paint

I am of opinion this Vessel should be Classed AI

The amount of the Fee£ 5 : : : is received by me,
James Libun Special£ : : :
Certificate (if required)£ : : :
Committee's Minute 15th Sept 1868

Character assigned B
A & C E

*This is a built, Spar Decked
Steamer appears to be No. 2
in my recent report to Committee
as built at Sunderland
I am of opinion she is eligible
for classification as a steamship*