

IRON SHIP.

No. 11686 Survey held at Sunderland Date, First Survey 11th January 1877 Last Survey 7th June 1877

On the Iron S.S. Bickley Yard Number 51 Master W. H. Appointed

TONNAGE under Tonnage Deck } <u>524.41</u>	ONE, OR TWO DECKED, THREE DECKED VESSEL.
Ditto of Third Spar } <u>14.44</u>	SPAR, OR AWNING DECKED VESSEL.
Ditto of Deep, or Raised or Dk. } <u>60.10</u>	HALF BREADTH (moulded) <u>13.92</u>
Ditto of House } <u>25.18</u>	DEPTH from upper part of Keel to top of Upper Deck Beams <u>16.13</u>
Ditto of Forecastle } <u>17.16</u>	GIRTH of Half Midship Frame (as per Rule) <u>26.88</u>
Gross Tonnage <u>631.29</u>	1st NUMBER <u>56.88</u>
Less Crew Space <u>28.43</u>	1st NUMBER, if a THREE-DECKED VESSEL } <u>—</u>
Less Engine Room <u>202.01</u>	deduct 7 feet }
Register Tonnage } <u>400.85</u>	LENGTH <u>174.83</u>
as cut on Beam }	2nd NUMBER <u>9.9114</u>
	PROPORTIONS—Breadths to Length <u>Under 7</u>
	Depths to Length—Upper Deck to Keel <u>11</u>
	Main Deck ditto <u>—</u>

Built at Sunderland
 When built 1877 Launched 18th April 1877
 By whom built A. Simey and Co
 Owners Pile and Co 311 Great St. Andrew City London
 Port belonging to London
 Destined Voyage Not fixed
 # Surveyed while Building, Afloat, or in Dry Dock

LENGTH on deck as per Rule ...	Feet. <u>174</u> Inches. <u>10</u>	BREADTH—Moulded... ..	Feet. <u>27</u> Inches. <u>10</u>	DEPTH top of Floors to Upper Deck Beams	Feet. <u>14</u> Inches. <u>9 1/2</u>	Power of Engines	Horse. <u>80</u>	Nº. of Decks with flat laid <u>One</u>	Nº. of Tiers of Beams <u>Two</u>
Dimensions of Ship per Register, length, <u>176 ft</u> breadth, <u>28 ft</u> depth, <u>14 ft 6 in</u>									

	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<u>7 1/2 x 2 1/8</u>	<u>7 1/2 x 2 1/8</u>
STEM, moulding and thickness... ..	<u>6 3/4 x 2 1/8</u>	<u>6 3/4 x 2 1/8</u>
STERN-POST for Rudder do. do. .. .	<u>6 3/4 x 4 1/4</u>	<u>6 3/4 x 4 1/4</u>
for Propeller	<u>22</u>	<u>22</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft .. .	<u>22</u>	<u>(Class 100 ft)</u>
FRAMES, Angle Iron, for 2/3 length amidships ..	<u>3 1/2</u>	<u>3 1/2</u>
Do. for 1/3 at each end	<u>3 1/2</u>	<u>3 1/2</u>
REVERSED FRAMES, Angle Iron	<u>3</u>	<u>2 1/2</u>
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ..	<u>16</u>	<u>7 1/8</u>
thickness at the ends of vessel	<u>8</u>	<u>6 1/8</u>
depth at 2/3 the half-bdth. as per Rule ..	<u>32</u>	<u>32</u>
height extended at the Bilges... ..	<u>5</u>	<u>3</u>
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>
Single or double Angle Iron on Upper edge } <u>2 1/2</u>	<u>2 1/2</u>	<u>6 1/8</u>
Average space... ..	<u>22</u>	<u>22</u>
BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <u>6 1/2</u>	<u>6 1/2</u>	<u>6 1/2</u>
Single or double Angle Iron, on Upper Edge } <u>2 1/2</u>	<u>2 1/2</u>	<u>6 1/8</u>
Average space... ..	<u>44</u>	<u>44</u>
BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } <u>7 1/2</u>	<u>7 1/2</u>	<u>7 1/8</u>
Single or double Angle Iron on Upper Edge } <u>3</u>	<u>3</u>	<u>7 1/8</u>
Average space... ..	<u>44</u>	<u>10 spaces</u>
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates and floors... ..	<u>12</u>	<u>9 1/8</u>
" Rider Plate	<u>9</u>	<u>9 1/8</u>
" Bulb Plate to Intercoastal Keelson	<u>4</u>	<u>3</u>
" Angle Irons	<u>4</u>	<u>3</u>
" Double Angle Iron Side Keelson	<u>5 1/8</u>	<u>5 1/8</u>
" Side Intercoastal Plates... ..	<u>5 1/8</u>	<u>5 1/8</u>
" do. Angle Irons	<u>4</u>	<u>3</u>
" Attached to outside plating with angle iron	<u>4</u>	<u>3</u>
BILGE Angle Irons	<u>4</u>	<u>3</u>
" do. Bulb Iron... ..	<u>4</u>	<u>3</u>
" do. Intercoastal plates riveted to plating for length	<u>4</u>	<u>3</u>
BILGE STRINGER Angle Irons	<u>4</u>	<u>3</u>
Intercoastal plates riveted to plating for length	<u>4</u>	<u>3</u>
SIDE STRINGER Angle Irons	<u>4</u>	<u>3</u>

	Inches in Ship.	Inches per Rule.
Flat Keel Plates, breadth and thickness	<u>32</u>	<u>9 1/8</u>
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied	<u>32</u>	<u>9 1/8</u>
fm up. part of Bilge to l. edge of Sh'rstrake	<u>33</u>	<u>10 1/8</u>
Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake.	<u>33</u>	<u>10 1/8</u>
Up. or Spar Dk Sh'rstrake, brdth & thickness	<u>33</u>	<u>10 1/8</u>
Butt Straps to outside plating, breadth & thickness	<u>33</u>	<u>10 1/8</u>
Lengths of Plating	<u>9 ft</u>	<u>2 in</u>
Shifts of Plating, and Stringers... ..	<u>44</u>	<u>8 ft</u>
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness...	<u>25</u>	<u>7 1/8</u>
Angle Iron on ditto	<u>22</u>	<u>5 1/8</u>
Tie Plates fore and aft, outside Hatchways	<u>4 x 3 x 6 1/8</u>	<u>4 x 3 x 6 1/8</u>
Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling	<u>22</u>	<u>5 1/8</u>
Waterways do. do.	<u>4 x 3 x 6 1/8</u>	<u>4 x 3 x 6 1/8</u>
Flat of Upper Deck do. do. (Iron)	<u>6 1/8</u>	<u>6 1/8</u>
How fastened to Beams	<u>36</u>	<u>7 1/8</u>
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	<u>36</u>	<u>7 1/8</u>
Is the Stringer Plate attached to the outside plating?	<u>22</u>	<u>5 1/8</u>
Angle Irons on ditto, No. <u>One</u>	<u>4 x 3 x 6 1/8</u>	<u>4 x 3 x 6 1/8</u>
Tie Plates, outside Hatchways	<u>9 x 7 1/8 x 5 1/8</u>	<u>9 x 7 1/8 x 5 1/8</u>
Diagonal Tie Plates on Beams, No. of pairs ..	<u>9 x 7 1/8 x 5 1/8</u>	<u>9 x 7 1/8 x 5 1/8</u>
Waterways materials and scantlings	<u>3 1/2</u>	<u>3 1/2</u>
Flat of Middle Deck do. do. (Iron)	<u>3 1/2</u>	<u>3 1/2</u>
How fastened to Beams	<u>22</u>	<u>5 1/8</u>
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams	<u>17</u>	<u>5 1/8</u>
Is the Stringer Plate attached to the outside plating?	<u>3 1/2</u>	<u>3 1/2</u>
Angle Irons on ditto, No. <u>Two</u>	<u>4 x 3 x 6 1/8</u>	<u>4 x 3 x 6 1/8</u>
Stringer or Tie Plates, outside Hatchways ..	<u>4 x 3 x 6 1/8</u>	<u>4 x 3 x 6 1/8</u>
Flat of Lower Deck	<u>2 1/2</u>	<u>2 1/2</u>
Ceiling betwixt Decks, thickness and material in hold	<u>4 1/2</u>	<u>4 1/2</u>
Main piece of Rudder, diameter at head ..	<u>2 3/4</u>	<u>2 3/4</u>
do. at heel	<u>2 3/4</u>	<u>2 3/4</u>
Can the Rudder be unshipped afloat? <u>Yes</u>	<u>5 1/8</u>	<u>5 1/8</u>
Bulkheads No. <u>4</u> Thickness of	<u>5 1/8</u>	<u>5 1/8</u>
Height up <u>to upper deck</u>	<u>5 1/8</u>	<u>5 1/8</u>
How secured to sides of ship <u>Between double frames</u> ..	<u>5 1/8</u>	<u>5 1/8</u>
Size of Vertical Angle Irons <u>3 x 2 1/2 x 6 1/8</u> and distance apart <u>30</u> ins.	<u>5 1/8</u>	<u>5 1/8</u>
Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u>	<u>5 1/8</u>	<u>5 1/8</u>

Transoms, material. Knight-heads. Hawse Timbers. Iron
 Windlass Swivel and Saddle Pall Bitt None required

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6 apart.
 The REVERSED ANGLE IRONS on floors and frames extend from near middle line to about lower 1/4 of stinger angle and to Gunwale alternately
 KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 in. diameter, averaging 5 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/4 ins. from centre to centre.
 Butts of Two Strakes at Bilge for half length, treble riveted with Butt Straps 1/8 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted — length amidships.
 Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for — length.
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 3 in

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double and Treble riveted
 Waterway, how secured to Beams (Explain by Sketch, if necessary)
 Beams of the various Decks, how secured to the sides Welded seams and rivets No. of Breasthooks, Four Crutches, Four
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angled Iron, Bessemer, and Co. Plates from the
 Manufacturer's name or trade mark, Connell Iron Company and Burgess Iron Foundry

The above is a correct description.
 Builder's Signature, Alfred Simey & Co Surveyor's Signature, William S. H.

IRON 472-0198

18562 *Sten*

State also Length and Diameter of Lower Masts and Bowsprit

NUMBER for EQUIPMENT		10. 938		Fathoms.	Inches.	Test per Certificate.	Lngh. & Size req'd pr Rule	Test req'd per Rule.	all Rogers' patterns.		ANCHORS, N ^o .		Weight.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
N ^o .	SAILS.	CABLES, &c.	Chain	210	1 1/4	28 1/8 tons.	210	28 1/8 tons	3984	14. 3. 14	13. 14. 2. 21	13. 2. 0	15 1/2 tons.			
	Fore Sails,	72/1551... 120 ft. 1/2" Chain	42 1/2 ft. 1/2" Chain	174	1 1/4	42 1/2 ft. 1/2" Chain	174	42 1/2 ft. 1/2" Chain	3981	12. 3. 7	14. 12. 3. 7	13. 2. 0	15 1/2 tons.			
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)	Commissioner's Machine			Commissioner's Machine		Commissioner's Machine								
	Fore Topmast Stay Sails	Chain	90	13/16	90	13/16	90	13/16	3975	5. 0. 0	7. 7. 2. 0	6. 0. 0	Do not require			
	Main Sails,	Hawser ...	90	1	90	1	90	1	3974	2. 3. 24	5. 5. 0. 0	3. 0. 0	according to present rule.			
	Towlines	100	5	100	5	100	5	100	1. 1. 27			1. 2. 0				
	Main Top Sails,	Warp	90	4	90	4	90	4								
	and	quality	15	3	15	3	15	3								

66