

# IRON SHIP.

No. *1300* Survey held at *Newcastle* Date, First Survey *18<sup>th</sup> June* Last Survey *5<sup>th</sup> November 1878*

On the *Iron Screw Steamer "Gannet"* Master *W. Geary*

TONNAGE under Tonnage Deck *1300.14*  
 Ditto of Third, Spar, or Running Deck  
 Ditto of Poop, or Raised Q. Deck  
 Ditto of Houses on Deck *51.16*  
 Ditto of Forecastle *35.07*  
 Gross Tonnage *1395.28*  
 Less Crew Space *49.98*  
 Less Engine Room *446.49*  
 Register Tonnage as out on Beam *898.81*

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
 SPAR, OR AWNING-DECKED VESSEL.  
 HALF BREADTH (moulded)... *16.50*  
 DEPTH from upper part of Keel to top of Upper Deck Beams *22.08*  
 GIRTH of Half Midship Frame (as per Rule) *35.37*  
 1st NUMBER *73.95*  
 2nd NUMBER *17790*  
 PROPORTIONS—Breadths to Length *7.29*  
 Depths to Length—Upper Deck to Keel *10.89*  
 Main Deck to Keel

Built at *Newcastle*  
 When built *1878* Launched *28<sup>th</sup> Sept/78*  
 By whom built *Palmer's S.B. & Iron Co. (Lima)*  
 Owners *J. Fenwick & Sons*  
 Port belonging to *London*  
 Destined Voyage *Odessa*  
 If Surveyed while Building, Afloat, or in Dry Dock. *While building*

LENGTH on deck as per Rule *240.7* BREADTH—Moulded... *33.0* DEPTH top of Floors to Upper Deck Beams *20.2* Power of Engines *220* Horse. *220* N<sup>o</sup>. of Decks with flat laid *One* N<sup>o</sup>. of Tiers of Beams *Two*

Dimensions of Ship per Register, length, *242.8* breadth, *33.8* depth, *20.05*

KEEL, depth and thickness... *8 x 2 1/2*  
 STEM, moulding and thickness... *8 x 2 3/4*  
 STERN-POST for Rudder do. do. *8 1/2 x 5*  
 " " for Propeller *8 1/2 x 5*  
 Distance of Frames from moulding edge to moulding edge, all fore and aft *24*  
 FRAMES, Angle Iron, for 3/4 length amidships... *5-3-8*  
 Do. for 1/2 at each end *5-3-7*  
 EVERSED FRAMES, Angle Iron *3-3-7*  
 FLOORS, depth and thickness of Floor Plate at mid line for half length amidships... *23 x 9*  
 " thickness at the ends of vessel *7*  
 " depth at 3/4 the half-bdth. as per Rule *15*  
 " height extended at the Bilges... *Sample continuous*  
 BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron *5 1/2 3 7 5 1/2 3 7*  
 Single or double Angle Iron on Upper edge *24*  
 Average space... *24*  
 BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron *9 x 9*  
 Single or double Angle Iron on Upper Edge *4 3 8 4 3 8*  
 Average space... *Sample as approved plan*  
 KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates *9*  
 " Rider Plate *Sample continuous*  
 " Bulb Plate to Intercoastal Keelson *4 4 9 4 4 9*  
 " Angle Irons *5-4-9 5-4-9*  
 " Double Angle Iron Side Keelson *24 x 8*  
 " Side Intercoastal Plate *Sample continuous*  
 " do. Angle Irons *5-4-9 5-4-9*  
 " Attached to outside plating with angle iron *3 3 7 3 3 7*  
 BILGE Angle Irons *5-4-9 5-4-9*  
 " do. Bulb Iron... *5-4-9 5-4-9*  
 " do. Intercoastal plates riveted to plating for length *5-4-9 5-4-9*  
 BILGE STRINGER Angle Irons *5-4-9 5-4-9*  
 Intercoastal plates riveted to plating for length

Flat Keel Plates, breadth and thickness... *37 11 36 11*  
 PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges *10 10*  
 " of doubling at Bilge, or increased thickness, and length applied *9 9*  
 " fm up. part of Bilge to l.r. edge of Sh'rstrake. *10 10*  
 Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied *40 12 40 12*  
 from Mn. to Up. or Spar Dk. Sh'rstrake. *40 12 40 12*  
 Up. or Spar Dk. Sh'rstrake, breadth & thickness *40 12 40 12*  
 Butt Straps to outside plating, breadth & thickness *11 1/2 16 10 1/2 13 11 1/2 16 10 1/2 13*  
 Lengths of Plating *12 feet 10 feet*  
 Shifts of Plating, and Stringers... *4 feet 4 feet*  
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness... *34 10 34 10*  
 Angle Iron on ditto *5-4-9 5-4-9*  
 Tie Plates fore and aft, outside Hatchways *6 6*  
 Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling *6 6*  
 Waterways do. do. *Iron 6 6*  
 Flat of Upper Deck do. do. *Iron 6 6*  
 How fastened to Beams *Riveted 6 6*  
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness *32 9 32 9*  
 Is the Stringer Plate attached to the outside plating? *Yes*  
 Angle Irons on ditto, No. *4 x 4 x 9 4 x 4 x 9*  
 Tie Plates, outside Hatchways *4 x 4 x 9 4 x 4 x 9*  
 Diagonal Tie Plates on Beams, No. of pairs *4 x 4 x 9 4 x 4 x 9*  
 Waterways materials and scantlings *4 x 4 x 9 4 x 4 x 9*  
 Flat of Middle Deck do. *4 x 4 x 9 4 x 4 x 9*  
 How fastened to Beams *4 x 4 x 9 4 x 4 x 9*  
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams *4 x 4 x 9 4 x 4 x 9*  
 Is the Stringer Plate attached to the outside plating? *Yes*  
 Angle Irons on ditto, No. *4 x 4 x 9 4 x 4 x 9*  
 Stringer or Tie Plates, outside Hatchways *4 x 4 x 9 4 x 4 x 9*  
 Flat of Lower Deck *4 x 4 x 9 4 x 4 x 9*  
 Ceiling betwixt Decks, thickness and material *2 1/2 2 1/2*  
 " in hold do *2 1/2 2 1/2*  
 Main piece of Rudder, diameter at head *6 1/2 6 1/2*  
 do. at heel *3 1/2 3 1/2*  
 Can the Rudder be unshipped afloat? *Yes*  
 Bulkheads No. *4* Thickness of *6 6*  
 " Height up *upper deck*  
 " How secured to sides of ship *Double frames & brackets*  
 " Size of Vertical Angle Irons *8 x 3 x 7/16* and distance apart *30 ins.*  
 " Are the outside Plates doubled two spaces of Frames in length? *Yes*

Transoms, material. Knight-heads. Hawse Timbers. *Iron*  
 Windlass *Emerson & Hall's Patent*

The FRAMES extend in one length from *Keel* to *Gunwale* Riveted through plates with *7/8* in. Rivets, about *7* apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to *A.B.S.A.I.* 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 1/2* in. diameter, averaging *5 1/2* ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *7/8* in. diameter, averaging *4 3/4* ins. from centre to centre.  
 " Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *7/8 x 3/4* in. diameter averaging *3 3/4 x 2 3/4* ins. from centre to centre.  
 " Butts of *Three* Strakes at Bilge for *half* length, treble riveted with Butt Straps *7/8* thicker than the plates they connect.  
 " Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *7/8* in. diameter, averaging *4* ins. from cr. to cr.  
 " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *7/8* in. diameter, averaging *3 3/4* 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 *half* length amidships.  
 " Butts of Main Stringer Plate, treble riveted for *half* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *half* length.  
 " Breadth of laps of plating in double riveting *4 1/2 x 5 1/2* Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Treble and double riveted*

Waterway, how secured to Beams *(Explain by Sketch, if necessary.)*

Beams of the various Decks, how secured to the sides? *Welded & riveted to the frames* No. of Breasthooks, *Six* Crutches, *Four*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *The whole of the Iron*

Manufacturer's name or trade mark, *from Palmer & Farrow on Tyne.*

The above is a correct description

Builder's Signature, *Palmer's Shipbuilding & Iron Co. Ltd.* Surveyor's Signature, *J. H. Cooke*

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



Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*  
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*  
Are the fillings between the ribs and plates solid single pieces? *Solid single pieces*  
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 faying surfaces? *Yes*  
Do any rivets break into or through the seams or butts of the plating? *A few* 2214 / Iron Ship

Masts, Bowsprit, Yards, &c., are *Iron* in *Good* condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Lower masts of Iron Fore mast length extreme 70ft 6 in main mast length extreme 66 feet. Diameter of the masts at the partners 22 in. formed with two plates in the round 6 1/2 inch thick to 5 1/2 at the head and heel. Edges double riveted and the butts treble riveted. Doubled at the partners with 6 1/2 plates makers of the Iron Palmers to Jarrow on Tyne.*

NUMBER for EQUIPMENT 18976						Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS.		N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.		
N <sup>o</sup> . <i>One sheet</i>	SAILS.		CABLES, &c.		270	1 1/2	4 1/2	270-1 1/2	4 1/2	66 3/4	Bowers	1	26.0.31	25.16.1.0	25.2.0	25.2.0			
			Chain		<i>breaking strain 66 1/2</i>				66 3/4		1	25.0.14	26.17.0.21	25.2.0	—	—			
	Fore Sails,		<i>River Wear Proving House, J. Hartness, Sept. 16. 6. 78.</i>																
	Fore Top Sails,																		
	Fore Topmast Stay Sails		Hamptn Strm Cbl		75	1 1/2	18	75-1	18	27	<i>River Wear Proving House, J. Hartness, Sept. 7. 9.</i>	1	21.3.21	22.7.2.0	21.3.0	22.3.1.0			
			Hawser ...		<i>R.W.P. &amp; J. Hartness, Sept. 23. 7. 78</i>														
	Main Sails,		Towlines ...		90	1 1/2	18	90-1 1/2	18	27	Stream	1	4.2.7 1/2	7.0.0.0	5.1.0				
	Main Top Sails,		Warp ...		90	1 1/2	18	90-1 1/2	18	27	Kedges	1	2.1.7 1/2	4.17.2.0	2.3.0				
			quality		Good	120	1 1/2	18	90-6			<i>R.W.P. &amp; J. Hartness, Sept. 26. 8. 78.</i>							
					Manilla	90	1 1/2	18				She has <i>2 life Long Boats and 2 others</i>							
and Rigging Wire																			
Standing and Running Rigging		sufficient in size and <i>Good</i> in quality.																	

The Windlass is *Good*. Capstan *Good* and Rudder *Good*. Pumps *Good*.

Engine Room Skylights.—How constructed? *Iron trunk & wood tops*. How secured in ordinary weather? *Bolted to angles*.

What arrangements for deadlights in bad weather? *Solid shutters & bulls eyes*.

Coal Bunker Openings.—How constructed? *Iron Comings*. How are lids secured? *Hatch Bars*. Height above deck? *29 in*.

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Eight Ports each side besides mooring pipes.*

Cargo Hatchways.—How formed? *Iron Comings & headledges riveted together*.

State size Main Hatch *20ft x 11ft*. Forehatch *8ft x 8ft*. Quarterhatch *16ft x 11ft & 16ft x 11ft*.

If of extraordinary size, state how framed and secured? *Ordinary size*.

What arrangement for shifting beams? *Deep web plate in the Hatchway, Bull plate beam in two after hatchways & Bull plate fore & after in each hatchway*.

Hatches, If strong and efficient? *Yes Solid hatches*.

Order for Special Survey No. <i>1208</i>	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	<i>1878 June 18. 21. 25. July 2. 4. 8. 10. 13. 17. 19. 20.</i>
Date <i>7 Aug 1878</i>		2nd. On the plating during the process of riveting	<i>29. 31. Aug 2. 5. 7. 12. 14. 19. 20. 26. 28. Sept 2. 6.</i>
Order for Ordinary Survey No. <i>—</i>		3rd. When the beams were in and fastened, and before the decks were laid	<i>12. 14. 18. 20. 24. 27. Oct 2. 4. 7. 9. 15. 22. 24.</i>
Date <i>—</i>		4th. When the ship was complete, and before the plating was finally coated or cemented	<i>26. 29. Nov 5.</i>
No. <i>376</i> in builder's yard.		5th. After the ship was launched and equipped	

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

*This is a Two decked vessel built in accordance with the tracings hereto attached, The Secretary's letter (NS) dated 12<sup>th</sup> June 1876, and in accordance with the Rules.*  
*She has a fore-castle 27 ft long, and a bridge deck 12 ft open at the ends. She is fitted with water ballast tanks, in the fore & after holds, and under the engines and boilers, the united lengths being 170 feet. The top plating 6 1/2 inch and the side plates 7 1/2 inch in thickness. Tanks tested with a head of water to the height of the load line and found good. The general quality of the workmanship is good throughout.*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Cement & Paint*. Outside *Paint*.

I am of opinion this Vessel should be Classed *100 A1 One deck and two tiers of beams.*

The amount of the Entry Fee ... *£ 5 : 0 : 0* is received by me, *P. Young*

Special ... *£ 58 : 12 : 6* 11 Nov 1878

Certificate ...

(Travelling Expenses, if any, £ ...)

Committee's Minute *19th November, 1878.*

Character assigned *100 A1 Iron Sh.*

*Lloyd's Register*

*DPW dbl bot 170 ft*

*depth bottom 170 ft 18 ft*

*Iron Sh.*