

# IRON SHIPS.

Rec 14/8/18

No. 9770 Survey held at Newcastle Date 4<sup>th</sup> March to 11<sup>th</sup> August 1880  
 on the "Mary Nixon" Master John B. Hill  
 Tonnage under tonnage deck 413.20 Built at Newcastle When built 1863 Launched 23<sup>rd</sup> May  
 Ditto of poop 44.54 By whom built Palmer Bros Owners John Nixon  
 Ditto of engine room 170.40  
 Total Register tonnage 587.34 Port belonging to Newcastle Destined Voyage London  
 Tonnage of surveyed while Building, Afloat, or in Dry Dock 587.34 while building

Length aloft	Feet. Inches.	Extreme Breadth	Feet. Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet. Inches.	Power of Engines	Horse.	No. of Decks
201.0		28.15		17.4		100		1
<i>(Dimensions of Ship per Register, length 201.0 breadth 28.15 depth 17.4)</i>								
Keel, if bar iron, depth and thickness	Inches in Ship.			Inches required per Rule.		Plates in Garboard Strakes, breadth and thickness		
Keel, if plate iron, breadth and thickness	7 x 2 3/4			7 1/4 x 2 3/4		41 x 7/16 30 1/16		
Stem, if bar iron, moulding and thickness	7 x 2 3/4			7 1/4 x 2 3/4		Ditto from Garboard to upper part of Bilges..		
Stem, if plate iron, breadth and thickness	7 x 2 3/4			7 1/4 x 2 3/4		" from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3 the entire depth of Hold		
Stern-post, if bar iron, moulding and thickness	8 x 5			7 1/4 x 5 1/2		" from 2/3 the depth of Hold to lower edge of Sheerstrake		
Stern-post, if plate iron, breadth and thickness	8 x 5			7 1/4 x 5 1/2		" Sheerstrake, breadth and thickness		
Distance of Frames from moulding edge to moulding edge, all fore and aft	21			21		Butt Straps to outside plating, breadth and thickness		
Frames, Size of Angle Iron, single or double	4 3 7/16			4 3 7/16		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		
Reversed Iron, to every frame or every frame	3 3 7/16			3 2 3/4 7/16		Angle Iron on ditto		
Floors, depth and thickness of Floor Plate at mid line	10 7/16			10 7/16 9/16		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways..		
Ditto ditto at Bilge Keelson	10 7/16			10 7/16 9/16		Diagonal Tie Plates on ditto		
Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	3 3 7/16			3 2 3/4 7/16		Planksheer, materials and scantlings		
Beams, Deck (No. 4, 2) double Angle Iron, Plate, Tee, or Bulb Iron	7 1/2 7/16			7 7/16		Waterway ditto ditto		
Double or single Angle Iron, on top edge	2 1/2 2 1/2 7/16			2 1/2 2 1/2 7/16		Flat of Upper Deck, thickness and material..		
Average space between	3 feet 6 inches			3 feet 6 inches		" how fastened to Beams..		
Hold, or Lower Deck (No. 31) double Angle, Tee, Plate, or Bulb Iron	7 1/2 7/16			7 7/16		Ceiling betwixt Decks and in Hold, thickness and material..		
Double or single Angle Iron on top edge	2 1/2 2 1/2 7/16			2 1/2 2 1/2 7/16		Clamps or Spirketting Plated ditto		
Average space between	2 1/2 x 4 1/2 frame alternate			2 1/2 x 4 1/2 frame alternate		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		
Paddle, sided and moulded, thickness of Plate size of Angle Iron	2 1/2 x 4 1/2 frame alternate			2 1/2 x 4 1/2 frame alternate		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		
Engine	2 1/2 x 4 1/2 frame alternate			2 1/2 x 4 1/2 frame alternate		Stringers in Hold		
Keelson, single or double plate, box, or intercostal	24 7/16			23 9/16		Flat of Lower Deck, thickness and material..		
Size of Plates top of floors	10 7/16			10 7/16 9/16		Main piece of Rudder, diameter at head		
Size of Angle Irons	4 1/2 3 1/2 7/16			4 1/4 3 3/4 9/16		" " " at heel		
Side, single or double, plate, box, or intercostal	4 1/2 3 1/2 7/16			4 1/4 3 3/4 9/16		(Can the Rudder be unshipped afloat)		
Bilge (No. 2) at each Bilge, single, or double, plate, or box	4 1/2 3 1/2 7/16			4 1/4 3 3/4 9/16		Bulkheads, No. 3 Thickness of		

has built to go goods

Transoms, material Plate or, if none, in what manner compensated for.  
 Knight-heads, and Hawse Timbers chocks  
 The Frames extend in one length from Starboard side to Starboard side rivetted through plates with (3/4 in.) rivets, about (6) apart.  
 The reverse angle irons on the floors extend in one length across the middle line from at double bottom to bilges from thence to hold beam stringer and alternately frames to deck.

Keelson, how are the various lengths of plates or angle irons connected? by Butt Straps  
 Plates, Garboard, double or rivetted to keel, and double or rivetted at upper edge, with rivets (1 1/4 ins.) diameter, averaging (3/4 ins.) apart.  
 Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart.  
 Butts from Keel to turn of bilge, worked carvel with butt straps (7/16 x 7/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 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 clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 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 single At lower edge double  
 Butts from bilge to planksheers, worked carvel with butt straps (7/16 x 7/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart. Breadth of laps in double rivetting (4 1/4) Breadth of laps in single rivetting (2 7/8)  
 Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? double rivetted  
 Planksheer, how secured to the plating of the sides Explain by sketch  
 Waterway " " planksheer and to the Beams if necessary. Bolted to stringer & outside plating  
 Deck Beams, how secured to the side? welded tees rivetted to frames  
 Hold or Lower Deck ditto do do

Paddle " " No. of breasthooks 5 crutches 5  
 What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?  
 Manufacturer's name or trade mark Anglo iron worked Palmer's Best, Plate do and Partingate Good's line  
 We certify that the above is a correct description of the several particulars therein given.  
 Builder's Signature Palmer Bros Surveyor's Signature J. H. L. ...

Are the lands or laps of the clewwork in all cases in breadth at least five and a half times the diameter of the rivets in double  
 ed edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? yes  
 the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? As observed  
 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? generally so 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 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.

4245 Br

She has SAILS.		CABLES, &c.			ANCHORS, and their weights.				
N <sup>o</sup> .		Marked Lloyd's Type	Fathoms.	Inches.	Tested to Tons.	Marked Lloyd's Type	N <sup>o</sup> .	Weight. Ex. Stock Tons.	Tested to Tons.
	Fore Sails,	Chain	270	1 1/2	37.4.0.0	Bowers, 12	2. 2. 65	19.1.7	20.4.0.7
<u>one</u>	Fore Top Sails,	<del>Chain</del> Stream Cable	90	7/8	13.15.0.0	12	2. 2. 65	3	18.2.21 19.13.0.14
	Fore Topmast Stay Sails,	Hawser	- "	8		12	2. 2. 65		16.2. 0.17. 16.1. 4
<u>Suit</u>	Main Sails,	Towlines	- "	6		Stream,		1	8.2. 4
	Main Top Sails,	Warp	- "	5		Kedges,		2	4.1. 2 2.3. 4
and		All of <u>good</u> quality.							

Her Standing and Running Rigging is sufficient in size and good in quality.  
 She has one Long Boat and two others  
 The present state of the Windlass is Good Capstan Good and Rudder Good Pumps 2 deck Pumps & Engine Pump

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought  
 No. 505 Surveys held 2nd. On the plating during the progress of rivetting  
 Date 8<sup>th</sup> March 1865 while building 3rd. When the beams were in and fastened, and before the decks were laid  
 Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated  
 No. — Section 18. 5th. After the ship was launched  
 Date —  
 State if she has a Spar Deck Raised Quarter deck or Forecastle

General Remarks, This vessel has a double bottom  
about 116 feet long, she is constructed  
similar to the S.S. "Conservator" Report No 9531,  
and classed A,

\* Messrs John Swaine & Co., 44<sup>th</sup> Bond Street, London, W.

In what manner are the surfaces preserved from oxidation? Inside Asphaltum & Red Lead  
 Ditto ditto Outside Paint

I am of opinion this Vessel should be Classed A 1  
 The amount of the Fee ..... £ 5 : : : is received by me,  
 Special ..... £ 37 : 10 : :  
 Certificate (if required) ..... £ : : : :  
 Committee's Minute 15 August 1865

Character assigned A 1  
It will be seen that much of the  
outside plating of this gun boat is  
1/16 thinner than the Old D. Hale,  
but she appears similar to the latter  
Classed A 1 as recommended, see also  
part double bottom named as the latter  
of which see not stated here