

# IRON SHIPS.

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 113.20 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 527.34 Port belonging to Newcastle Destined Voyage London  
 If surveyed while Building, Afloat, or in Dry Dock 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
(Dimensions of Ship per Register, length 201.0 breadth 28.15 depth 17.4)											
Keel, if bar iron, depth and thickness.....	Inches in Ship.		Inches required per Rule.		Plates in Garboard Strakes, breadth and thickness.....						
„ if plate iron, breadth and thickness.....	7 x 2 3/4		7 1/4 x 2 3/4		Ditto from Garboard to upper part of Bilges..						
Stem, if bar iron, moulding 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.....						
„ if plate iron, breadth 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 bar iron, moulding and thickness					„ Sheerstrake, breadth and thickness.....						
„ if plate iron, breadth and thickness					Butt Straps to outside plating, breadth and thickness.....						
Distance of Frames from moulding edge to moulding edge, all fore and aft.....	21		21		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness						
Frames, Size of Angle Iron, single or double..	4 3		7 1/6 3		Angle Iron on ditto.....						
„ „ Reversed Iron, to every frame or every frame.....	3 3		7 1/6 3		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways..						
Floors, depth and thickness of Floor Plate at mid line.....	10 7/6		10 7/6 7/6		Diagonal Tie Plates on ditto.....						
„ Ditto ditto at Bilge Keelson	10 7/6		10 7/6 7/6		Planksheer, materials and scantlings.....						
„ Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	3 3		7 1/6 3		Waterway ditto ditto.....						
Beams, Deck (No. 4, 2) double Angle Iron, Plate, Tee, or Bulb Iron.....	7 1/2 7/6		7 1/2 7/6		Flat of Upper Deck, thickness and material..						
„ „ double or single Angle Iron, on top edge.....	2 1/2 2 1/2 7/6		2 1/2 2 1/2 7/6		„ „ how fastened to Beams..						
„ „ average space between.....	3 feet 6 inches				Ceiling betwixt Decks and in Hold, thickness and material.....						
„ Hold, or Lower Deck (No. 31) double Angle, Tee, Plate, or Bulb Iron	7 1/2 7/6		7 1/2 7/6		Clamps or Spirketting Plated ditto.....						
„ „ double or single Angle Iron on top edge.....	2 1/2 2 1/2 7/6		2 1/2 2 1/2 7/6		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness						
„ „ average space between.....	2 1/2 x 4 1/2 frame alternately				Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams.....						
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron					Stringers in Hold double single iron.....						
„ Engine „ „ „ „ „ „					Flat of Lower Deck, thickness and material..						
Keelson, single or double plate, box, or intercostal	24 7/6		23 7/6		Main piece of Rudder, diameter at head....						
„ Size of Plates top of floors..	10 7/6		10 7/6		„ „ „ at heel....						
„ Size of Angle Irons.....	4 1/2 3 1/2 7/6		4 1/2 3 1/2 7/6		(Can the Rudder be unshipped afloat?)						
„ Side, single or double, plate, box, or intercostal	3 3 7/6		3 3 7/6		Bulkheads, No. 3 Thickness of 7/6						
„ Bilge (No. 2) at each Bilge, single, or double, plate, or box.....	4 1/2 3 1/2 7/6		4 1/2 3 1/2 7/6		„ Height up upper deck						

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 Port 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,  
 „ „ „ on the frames „ „ from

Keelson, how are the various lengths of plates or angle irons connected? by Butt Straps  
 Plates, Garboard, double or rivetted to keel, double or rivetted at upper edge, with rivets ( 1 1/4 ins.) diameter, averaging ( 3 1/2 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 ( 7/6 x 7/6 ) 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 ( 7/6 x 7/6 ) 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 knees 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-Marked Palmers Best, Plates do and Paragon's Good Steel  
 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. L. L.



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  
 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 Bm

She has SAILS.		CABLES, &c.		ANCHORS, and their weights.	
N <sup>o</sup> .		marked Lloyd's Type	Fathoms.	Inches.	Tested to Tons.
one	Fore Sails,	Chain { C. 2. 8. 65	270	1 1/2	37.4.0.0
	Fore Top Sails,	Stream Cable C. 2. 8. 65	90	7/8	13.15.0.0
	Fore Topmast Stay Sails,	Hawser	- "	8	
two	Main Sails,	Towlines	- "	6	
	Main Top Sails,	Warp	- "	5	
and		All of <u>good</u> quality.			
Her Standing and Running Rigging		is		sufficient in size and <u>good</u> in quality.	
She has <u>one</u>		Long Boat and <u>two others</u>			
The present state of the Windlass is		<u>Good</u> Capstan		<u>Good</u> and Rudder <u>Good</u> Pumps <u>2 deck Pumps</u> <u>&amp; Engine Pump</u>	

Order for Special Survey	DATES of	1st. On the several parts of the frame, when in place, and before the plating was wrought
No. <u>505</u>	Surveys held	2nd. On the plating during the progress of rivetting
Date <u>8<sup>th</sup> March 1865</u>	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. <u>—</u>	Section 18.	5th. After the ship was launched
Date <u>—</u>		

State if she has a Spar Deck Revised 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,

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

The amount of the Fee .....£ 5: : : is received by me,

Special .....£ 37: 10: :  
 Certificate (if required) .....£ : : : :

Committee's Minute 15 August 18 65

Character assigned A

J. H. Tiltman  
 It will be seen that much of the  
 outside plating of this gun boat is  
 thinner than the Old O. A. Hale,  
 but she appears similar to the  
 classed A as recommended, see also  
 part double bottom named as the  
 of which are not stated here.

\* Messrs John Sturges & Co., 44-2 Bond Street, London, W.