

IRON SHIPS.

Rec 28/4/70

128

Survey held at Hartlepool Date 22nd November 1869 to 10th April 1870 M
 Screw Steamer "Magdalene" CASE No. 22
 Master Bowman

Age under tonnage deck 640.70
 Atto of quarter deck 57.92
 Ditto of poop, forecastle, or other erections on upper deck 4.70
 Ditto of spar deck
 Ditto of engine room 225.00
 Gross tonnage, less crew space 677.16
 Total Register tonnage, as cut on beam 752.07

Built at Hartlepool When built 10/70 Launched 19th March
 By whom built Wm. Alexander Owners Appleby Ropner Co.
 Port belonging to West Hartlepool Destined Voyage France
 If Surveyed while Building, Afloat, or in Dry Dock White Building

Length aloft	Feet. Inches.	Extreme Breadth	Feet. Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet. Inches.	Horse.	N°. of Decks	Tons
(Dimensions of Ship per Register, length 200.3 breadth 20.0 depth 15.0)								

Keel, if bar iron, depth and thickness.....	Inches in Ship.	Inches required per Rule.	Plates in Garboard Strakes, breadth and thickness	Inches. In Ship.	16ths. In Ship.	Inches. required per Rule.	16ths required per Rule.
.. if plate iron, breadth and thickness	8x2 1/2	7x2 3/4	30 10/16	30	10/16	30	10/16
Stem, if bar iron, moulding and thickness	8x2 3/4	7x2 3/4	Ditto from Garboard to upper part of Bilges	9/16	9/16	9/16	9/16
.. if plate iron, breadth and thickness	9 1/4 x 4 3/16	7x5 1/2	.. from upper part of Bilge to a perpendicular height from upper side of Keel of 3/8ths the entire depth of Hold	8/16	8/16	8/16	8/16
Stern-post, if bar iron, moulding and thickness	21	21	.. from 3/8ths depth of Hold to lower edge of Sheerstrake	7/16	7/16	7/16	7/16
.. .. if plate iron, breadth and thickness			Sheerstrake, breadth and thickness	4 1/2	9/16	30	11/16
Distance of Frames from moulding edge to moulding edge, all fore and aft			Butt Straps to outside plating, breadth and thickness	9x1 1/4 to 7/16	8 1/4 to 7/16	8 1/4 to 7/16	8 1/4 to 7/16
Frames, Size of Angle Iron, single or double..	4 3	1/16	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	2 9	10/16	28 1/2 10/16 & 10/16	
.. Reversed Iron, if to every frame or every — frame.....	2 3/4 2 3/4	1/16	Angle Iron on ditto	4 1/2 x 3 1/2 x 7/16	4 1/2 + 3 1/2 + 7/16		
Floors, depth and thickness of Floor Plate at mid line	10 1/2 x 8/16	10 1/2 + 0/16	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	10 1/2	8/16	10 1/2	8/16
.. Ditto ditto at Bilge Keelson	9 x 8/16	9 + 8/16	Diagonal Tie Plates on ditto	10 1/2	8/16	10 1/2	8/16
.. Size of Reversed Angle Iron, and No. one at top of Floor Plate	2 3/4 2 3/4	1/16	Planksheer, materials and coatings				
Beams, Deck (N°. 56) double Angle Iron, Plate, Tee, or Bulb Iron	7 x 1/16	7 + 1/16	Waterway ditto ditto	3 1/2	7/16	3 1/2	
.. double or single Angle Iron, on top edge....	2 1/2 2 1/2	6/16 2 3/4 2 1/2 5/16	Flat of Upper Deck, thickness and material	9/16	in. B.	-	
.. average space between	3 1/2 - 4 -	3 1/2 - 6 -	.. how fastened to Beams	9/16	in. B.	-	
.. Hold, or Lower Deck (N°. 25) double Angle, Tee, Plate, or Bulb Iron	7 x 1/16	7 + 1/16	Ceiling betwixt Decks and in Hold, thickness and material	2 1/2	Plank	-	
.. double or single Angle Iron on top edge....	2 3/4 2 3/4	1/16 3 2 3/4 6/16	Clamps or Spirkeffing ditto				
.. average space between	2 1/4 to 2 1/2 frames	2 1/4 to 2 1/2 frames	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	2 2	0/16	2 1	0/16
.. Paddle, sited and moulded, thickness of Plate size of Angle Iron			Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams Double Angles	2 1/2 x 2 1/2 x 9/16 4 1/2 + 3 1/2 + 7/16 Single			
.. Engine			Stringers in Hold Double Angled	4 1/2 x 3 1/2 x 7/16	4 1/2 + 3 1/2 + 7/16		
Keelson, single or double plate, box, or intercostal			Flat of Lower Deck, thickness and material				
.. Size of Plates	12 x 10/16	12 + 10/16	Main piece of Rudder, diameter at head	4 7/8		4 3/4	
.. Size of Angle Irons	4 1/2 3 1/2	7/16 4 1/2 3 1/2 7/16	.. at heel	2 3/4		2 3/4	
.. Side, single or double, plate, box or intercostal			(Can the Rudder be unshipped afloat Yes)				
.. Bilge (No. one) at each Bilge, single, or double, plate, or box	4 1/2 3 1/2	7/16 4 1/2 3 1/2 7/16	Bulkheads, N°. 4 Thickness of	6/16		6/16	

Transoms, material Plate or, if none, in what manner compensated for.

Knight-heads, and Hawse Timbers Iron

The Frames extend in one length from Keel to gunwale

The reverse angle irons on the floors extend in one length across the middle line from bottom of bilge to top of bilge

" " " on the frames " " " from bilge to gunwale on alternate frames

Keelson, how are the various lengths of plates or angle irons connected? butt of plates & angles blotted, strapped & riveted.

Plates, Garboard, double or riveted to keel, double or at upper edge, with rivets (1 ins.) diameter, averaging (3 1/8 ins.) apart.

.. Edges from Garboards to upper part of bilge, worked clencher, double or single riveted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart.

.. Butts from Keel to turn of bilge, worked carvel with butt straps (9 x 9/16) thick, double or single riveted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.

Do the butt straps lap over and rivet through the lands of the stave below? no

.. Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single riveted; with rivets (3/4 in.) diameter, averaging (2 1/4 in.) apart.

Do the butt straps lap over and rivet through the lands of the stave below? no

.. Edges of Sheerstrake, double or single riveted? At upper edge Single to bulkhead At lower edge Double

.. Butts from bilge to plankshears, worked carvel with butt straps (9 x 9/16) thick, double or single riveted; with rivets (3/4 in.) diameter, averaging (2 3/4 ins.) apart. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 3/4)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single riveted? Double

Planksheer, how secured to the plating of the sides Explain by sketch

Waterway " " planksheer and to the Beams if necessary Gutter Waterways

Deck Beams, how secured to the side? Beam and turned & knees welded,

Hold or Lower Deck ditto Same as deck

Paddle

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

Manufacturer's name or trade mark Hartlepool Iron Works. Hopkings & Co. Lloyd's Register Foundation

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

Builder's Signature Wm. Alexander & Co.

Surveyor's Signature S. P. Ryland & Son

No. of breasthooks Four crutches of four good

10446 C137

7906 Iron

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 riveted 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 fay close together throughout their length without requiring any making good of deficiencies?

Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid in m.

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 heads well and sufficiently countersunk in the outer plate? All through

Are there any rivets which either break into or have been put through the seams or butts of the plating? A few in butts

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. No.	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c		Weight. Ex. Stock.	Test as per Certificate.	Wght req'd per Rule.	Test req'd per Rule.
								N.	Tested by John D.	Tested by John D.			
	Fore Sails,	Chain	270	13/0	34	13/0	34	Bowers	3	17-0-0	10-6-3-14	16-3-0	10-0-0-0
	Fore Top Sails,									16-3-0	10-0-2-14	16-3-0	10-0-0-0
	Fore Topmast Stay Sails	Hemp Stream Cable	90	13/16				Stream	1	7-0-0		7-0-0	
	Main Sails,	Hawser	100	6				Kedges	2	3-2-14	1-3-10	3-2-0	
	Main Top Sails,	Towlines	90	9-1/2								1-3-0	
and	All of <u>Good</u> quality.	Warp	90	5									
		80	4										

Her Standing and Running Rigging Wire & Hemp sufficient in size and

Good in quality.

She has Two life Long Boat and one jolly

The present state of the Windlass is Good Capstan Iron Good and Rudder Good Pumps Two of 4 in. Iron

Order for Special Survey DATES of

No. 336 Surveys held

Date 16 Nov 1869 while building

Order for Ordinary Survey

No. _____ as per

Date _____ Section 18.

1st. On the several parts of the frame, when in place, and before the plating was wrought.

2nd. On the plating during the progress of rivetting

3rd. When the beams were in and fastened, and before the decks were laid

4th. When the ship was complete, and before the plating was finally coated

5th. After the ship was launched

{ Special Survey
seen three such
week during building

State if she has a Spar Deck _____ Poop _____ or Forecastle _____

General Remarks. Has a raised Quarter Deck frames to the top height beams built $6\frac{1}{2} \times \frac{6}{16}$ double Angles on top edge $2\frac{1}{2} \times 2\frac{1}{2} \times \frac{4}{16}$. Stringer plates on ends $2\frac{1}{2} \times \frac{6}{16}$ Angles on $2\frac{1}{2} \times 5\frac{1}{2} \times \frac{6}{16}$. Tie plates $9\frac{3}{4} \times \frac{6}{16}$ Diagonal $2\frac{1}{2} \times 5\frac{1}{2} \times \frac{6}{16}$. Plating outside $\frac{6}{16}$ Deck 3 in. G. Pine

Is fitted with water ballast tanks in fore & after holds side plates $\frac{7}{16}$ angles on $2\frac{1}{2} \times 3\frac{1}{2} \times \frac{6}{16}$, Web plates $\frac{6}{16}$ angles top & bottom edges $3 \times 3 \frac{1}{2} \times \frac{6}{16}$, knee plates $\frac{7}{16}$ top plating $\frac{6}{16}$, frames cut off connection made up with knee plates top & bottom of sides of tank.

Length over 12 Depth 7 Breadth Sheer tanks increased in breadth to $4\frac{1}{2} \times \frac{6}{16}$ Bulk plates fitted between bilge Keelson Angle Irons $7\frac{1}{2} \times \frac{6}{16}$, Deck beam stringer plates increased $\frac{6}{16}$ in thickness for half repeat length

Worthy Alexander 178

In what manner are the surfaces preserved from oxidation? Inside Flat bottom Portland Cement
Ditto ditto Outside other part with paint & varnish

I am of opinion this Vessel should be Classed A 1 Port Double Bottom.

The amount of the Fee £ 5 : 0 : 0 is received by me,

Special £ 33 : 17 : 0

Certificate (if required) £ : - : -

J. P. Gladstone

Committee's Minute 29th April 1870

Character assigned A 1

J.W. A.C.P. W.H.

This Ship seems to have been built in accordance with the Rules, and Midship Section previously submitted to London and by the reduction of thickness of outside plates allowed by Committee Circular No 240, is eligible for the class recommended above.

April 20th 1870 J. P. Gladstone

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