

IRON SHIPS.

Rec 17/11/68

No. 2471 Survey held at West Hartlepool Date First Survey 16th Feb. to 16th Nov. 1865
on the Ship "Persian Empire" Master D. Remy

Tonnage under tonnage deck 1145.29 Built at West Hartlepool When built 1865 Launched 9th Sept.
Ditto of poop or spar deck 10.90 By whom built Pile Spence & Co Owners G. Duncan & Co.
Ditto of engine room 14.22 Port belonging to London Destined Voyage London & India
Total Register tonnage 1532.49
Cross tonnage 1532.49
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
232	3	2	37	10		23	0				Two
(Dimensions of Ship per Register, length <u>230</u> breadth <u>37.9</u> depth <u>23.0</u>)											
Keel, if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule.								
Keel, if plate iron, breadth and thickness	10 3/4 x 2 1/2		9 x 3								
Stem, if bar iron, moulding and thickness	10 3/4 x 2 1/2		9 x 3								
Stem, if plate iron, breadth and thickness	10 3/4 x 2 1/2		9 x 3								
Stern-post, if bar iron, moulding and thickness	10 3/4 x 2 1/2		9 x 3								
Stern-post, if plate iron, breadth and thickness	10 3/4 x 2 1/2		9 x 3								
Distance of Frames from moulding edge to moulding edge, all fore and aft	21		21								
Frames, Size of Angle Iron, single or double	Inches in Ship.		Inches required per Rule.								
Frames, Size of Angle Iron, single or double	5 3/2		9 1/6								
Reversed Iron, if to every frame or every other frame	3 1/2		8 1/6								
Floors, depth and thickness of Floor Plate at mid line	25 1/2		11 1/6								
Ditto ditto at Bilge Keelson	12		11 1/6								
Size of Reversed Angle Iron, and No. at top of Floor Plate	3 1/2		8 1/6								
Beams, Deck (No. 63) double Angle Iron, Plate, Tee, or Bulb Iron	9 1/2		9 1/6								
Double or single Angle Iron, on edge	4		7 1/6								
Average space between	3 ft. 6 in.		3 ft. 6 in.								
Hold, or Lower Deck (No. 63) double Angle, Tee, Plate, or Bulb Iron	9 1/2		9 1/6								
Double or single Angle Iron, on edge	4		7 1/6								
Average space between	3 ft. 6 in.		3 ft. 6 in.								
Paddle, sided and moulded, thickness of Plate size of Angle Iron	2 1/4		11 1/6								
Keelson, single or double plate, box, or intercostal	17		11 1/6								
Size of Plates	2 1/2		10 1/2								
Size of Angle Irons	4		8 1/2								
Side, single or double, plate, box, or intercostal	9 x 9 1/6		6 x 5								
Bilge (No. one with double plate, or single, or double, plate, or box)	5		10 1/6								
Transoms, material Plate or, if none, in what manner compensated for.											
Knight-heads, and Hawse Timbers	G. P. & Co.										
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	top of bilge to top of bilge										
Keelson, how are the various lengths of plates or angle irons connected?	Butts of plates & angle lines shifted & rivetted										
Plates, Garboard, double or rivetted to keel, double or 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 (7/8 in.) diameter, averaging (2 3/4 ins.) apart.											
Butts from Keel to turn of bilge, worked carvel with butt straps (11 x 1 1/2) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 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 (7/8 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 to bulwark At lower edge Double											
Butts from bilge to planksheers, worked carvel with butt straps (10 x 1 1/2 x 1 1/2) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (2 3/4 ins.) apart. Breadth of laps in double rivetting (5) Breadth of laps in single rivetting (none)											
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? All double											
Planksheer, how secured to the plating of the sides	Explain by sketch										
Waterway, planksheer and to the Beams	if necessary.										
Deck Beams, how secured to the side?	Beam ends turned & pieces welded										
Hold or Lower Deck ditto	Same as above										
Paddle	No. of breasthooks Six crutches Three										
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?	Good										
Manufacturer's name or trade mark	Belfast & W. Hartlepool Iron Co. Bedlington & Co. & Wilson & Co.										
We certify that the above is a correct description of the several particulars therein given.											
Builder's Signature	Surveyor's Signature										

4397 Lm

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 in double rivetted 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 lay close together throughout their length without requiring any making good of deficiencies? They do

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 one thickness

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 holes 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.



Fore & main masts of 8/16 plate at wedging tapered to 7/16 at head & hals made with three plates, double rivetted at edges & butts with 3/4 rivets spaced 2 3/4 in, laps of edges 4 in. length 80 & 90 ft. respectively, length of plates 9 ft. Diameter at wedging 32 head 22 & head 26 in. Mizen mast of 7/16 plate at wedging tapered to head & hals. ANCHORS, and their weights.

She has SAILS.

CABLES, &c.

	Chain	Fathoms.	Inches.	Tested to Tons.	Bowers,	N ^o .	Weight. Ex. Stock	Tested to Tons.
Fore Sails,	.....	300	17/10	68	.....	3	35-0-0	32-7-2
Fore Top Sails,	Hempen Stream Cable	90	1	.....	.....	.....	34-1-12	31-10-0
Fore Topmast Stay Sails,	Hawser Manila	90	9	.....	.....	.....	31-2-10	29-16-3
Main Sails,	Towlines	90	11	.....	Stream, including stock	1	13-2-26	.....
Main Top Sails,	Warp	90	7 1/2	.....	Kedges, Do.	2	6-0-20	3-5-6
	All of Good quality.	.....	.....	.....	.....	.....	.....	.....

Her Standing and Running Rigging Wire Hemp & Manila sufficient in size and Good in quality.

She has Two life Long Boat and Butter Grog & Jolly

The present state of the Windlass is Good Capstan 3 of Iron and Rudder Good Pumps 3 of Iron good, 2 of brass

Order for Special Survey	DATES of	1st.	2nd.	3rd.	4th.	5th.
No. <u>222</u>	Surveys held	On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the progress of rivetting	When the beams were in and fastened, and before the decks were laid	When the ship was complete, and before the plating was finally coated	After the ship was launched
Date <u>1st March 1865</u>	while building					
Order for Ordinary Survey	as per					
No.	Section 18.					
Date						

State if she has a Spar Deck Peep or Forecastle

General Remarks, + to 6/16, made with two plates double rivetted edges & butts 3/4 rivets spaced 2 3/4 Two angle Irons inside 4 1/2 x 3 x 7/16, Bowsprit made in the same way with two angle Irons inside 5 x 3 1/2 x 1/6, Lower Gunwale of 6/16 tapered to 4 with three angle Irons inside 3 x 3 x 1/6, Topsail Gunwale 5/16 tapered to 1/6 with three angle Irons inside 2 1/2 x 2 1/2 x 1/6 Has a Forecastle with deck house aft & in midships. Frames of forecastle all to the top height. Beams of bulw plates 8 x 8/16 double angle Irons on top edge 3 x 3 x 7/16, Plating 6/16 angle rivetted at edges double at butts 3/4 rivets spaced 3 in. Waterways of deck 6 x 12. Plank of deck 3 in (G. Pine) Intercoastal Keelson fitted on each side between bulge & centre Keelson. Plates 22 x 1/2 double angle Irons 5 x 4 x 1/6. Bulw plates 9 x 9/16 fitted between bulge Keelson & hold stinger angle Irons, on both sides fore & aft. Additional stringers fitted to the bulw bars about 14 ft. below hold beams double angle Irons 15 x 4 x 10/16 with bulw plates between 9 x 9/16 for 3/5 of the length. Double angle Iron stringers fitted between decks 5 x 4 x 10/16 from the after bulwhead thence foreward.

James Spence & Co. Limited
Mobile
Managing Director

In what manner are the surfaces preserved from oxidation? Inside Flat cemented with Portland Cement other parts coated with three coats of paint

Ditto ditto

Outside

Bottom coated with McInnes Patent compound

I am of opinion this Vessel should be Classed A1

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

No Special£ 76 : 12 : 0

Certificate (if required)£ : : :

Committee's Minute 17 November 1865

Character assigned A1

A & C. P.

James Spence & Co. Limited
Mobile
Managing Director
This Iron Sailing Ship appears eligible for Classification as recommended above
Nov 17/65

James Spence & Co. Limited
Mobile
Managing Director
Date 17/11/65