

IRON SHIPS.

Rec 12/6/63

7825 Survey held at Sunderland Date June 4th 1863

SS "Hector" Master J. F. Thompson

Age ¹⁴²² ⁴⁹² Gross 1614 Engine Room 319 Register 129.5 Built at Sundstrand

Built 1863 By whom built James Loring Owners Housley & Co

belonging to Sunderland Destined Voyage Mediterranean

Surveyed Afloat or in Dry Dock during Building

1 aloft	Feet. 240	Inches. "	Extreme Breadth....	Feet. 34	Inches. 2	Depth from top of Upper Deck } Beam to top of Floor.....	Feet. 20	Inches. 1	Power of Engines....	Horse No. 1800
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Inches of Frames or Ribs from moulding edge to moulding edge, all fore and aft	Inches in Ship.	Inches required per Rule.	Spar deck - / 3	Inches.		Inches.	
				In Ship.	10ths. In Ship	required per Rule.	16ths required per Rule.
18	✓	18	Stem, if bar iron, moulding and thickness	8 1/2 x 3 in	8 1/2 x 3 in		

Inches. In Ship.	Inches. In Ship.	16ths In Ship.	Inches.		16ths required
			per Rule.	per Rule.	
5	3	9	5	3	9

bottom of Floor Plate.....		" "	" " if plate iron, breadth and thickness
depth and thickness of Floor Plate at mid line	20 "	10x20 "	10x Keel, if bar iron, depth and thickness..... 8 1/2 x 3 in 8 1/2 x 3 in
depth and thickness of Floor Plate at bottom of Floor Plate.....		" "	" " if plate iron, breadth and thickness

depth and thickness of Floor Plate	5 1/2	"	10	"	"	40	Garboard Plates, thickness.. From Garboard to upper	Description of Iron.	"	12	✓	"	12
Bilge Keelson	3 1/2	3	8	3 1/2	3	8		"	11	✓	"	11	

No. 1 at top of Floor Plate.	5	3	9	5	3	9	part of Bilge.....	11	11
nes, Size of Angle Iron, single or double.	5	3	9	5	3	9	From upper part of Bilge	"	10
" Reversed Iron, to every frame	to above	to above	to above	to above	to above	to above	to Sheerstrakes.....	"	10
	5	3	9	5	3	9	Sheerstrakes	double by 185 dwt	11

ns, Deck (N ^o . 54) double Angle Iron - Bulb Iron with double Angle Iron on top	<i>To the gunwale</i> 3 3 6 3 3 6	Breadth & thickness of Butt Straps to outside plating }	Material. <div style="text-align: left;"> 8 $\frac{12-11}{16}$ 10 8 $\frac{12-11}{16}$ 12 </div>
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" depth & thickness of plate amidships	8½"	"	10'	8½"	"	9'
" double or single Angle Iron,						
two lower angles						
Plank sheers						
Gunwale Plate or Stringer on ends of Up. Dk Beams }	Iron	26	10'	25½"	10'	
Arch I-beam ditto		4x4	9'			

Angle iron on ditto.....	1	1	1
Waterway	1	1	1
Deck	1	1	1
Ceiling in Hold	1	1	1

Hold, or Lower Deck (No. 44)	3 1/4	3 1/4	6	3	3	6	Ceiling in Hold	Katharine	2 1/2	✓
double Angle Iron or Bulb Iron							Ceiling betwixt Decks	Batten		
with double Angle Iron on top							Beam Clamps			
depth & thickness of plate amidships	8 1/2	"	10	8 1/2	"	10				

" double or single Angle Iron on lower edge	3 feet	3 feet	" Finger Plate on Spar Deck	26	1		
average space between			" Stringer Plates on ends of Hold or Lower Dk Beams	Iron 26	10	25 1/2	10
				6x4	9		

Ceiling between Decks *Batten*
 Stringer or Tie Plates out-
 side Hatchways *lower & main deck 13 10*
Star deck 13 8
 Deck Beam Cleamps

[illegible]

Side or Bilge	6	4	9	5	4 1/2	9	Deck, Upper, how fastened to Beams	Screw Bolts & Nuts
Number	Three, on each side	see plan						

nsoms, material None or, if none, in what manner compensated for. Round Stern connected by the Woods & Springer
 Light-heads " are they free from defects? Bulkheads, N^o. Four Thickness of 7/16
 how secured to the sides of the ship between two beams

size of vertical angle iron and their distance apart $3\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$ - 30 in. apart.

reverse angle irons on the floors extend in one length across the middle line from the fact to above the hold beam
 " " " on the frames " " " from keel to main gunwale

Edges from Garboards to upper part of bilge, worked ~~carvel with a lining piece (— in.) thick, or~~ clenchler, double ~~or single~~ rivetted; rivets ($\frac{1}{2}$ in.)

Butts from Keel to turn of bilge, worked carvel with a lining piece $\frac{12 \times 11}{16}$ thick, ~~double or single~~ rivetted; rivets ($\frac{7}{8}$ in.) diameter.

averaging ($3\frac{1}{4}$ ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No
Edges from bilge to planksheer, worked ^{clencher} ~~carvel~~ with a lining piece () thick, double ^{and} ~~single~~ rivetted; rivets ($\frac{7}{8}$ in.) diameter, averaging
() from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? No

Butts from bilge to planksheers, worked carvel with a lining piece $\frac{10 \times 4}{16}$ thick, ~~or cloncher, double or single rivetted~~; rivets ($\frac{7}{8}$ in.) diameter averaging ($3\frac{1}{4}$ ins.) from centre to centre of rivets. Breadth of laps in double rivetting (5) Breadth of laps in single rivetting (3)

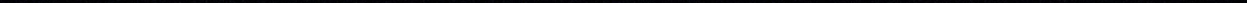
plankshoe, how secured to the plating of the sides
 " " plankshoe and to the Beams } Explain by sketch,
 " " " " " " } if necessary.

Deck Beams how secured to the side? *Turned down to form knee & riveted to frames*

old or Lower Deck ^{do}
~~Star~~ Star deck Beams, Knee Plates as ^{do} rule ✓

of breasthooks Seven crutches a how are pointers compensated? In same manner as handrocks
 What description of iron is used for the angle iron and plate iron in the vessel? Amis Lacey Builder's Signature
 Angle iron Stimpkins & Co. of New York Plate iron of New York

Wiles Polkow & Vaughan & Perwent Iron Works



3186 Iron

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivet edges and butts, and at least three 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? yes
Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? in solid ding
Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? yes and are the rivet holes well and sufficiently countersunk in the outer plate? they are
Are there any rivets which either break into or have been put through the seams or butts of the plating? very few

Her Masts, Yards, &c., are in good condition, and sufficient in size and length.
She has SAILS.

N ^o .		CABLES, &c.		ANCHORS, and their weights.		N ^o .
		<u>certificates produced</u>	Fathoms.	<u>certificates produced</u>		
1	Fore Sails,	<u>Proof chain 55 1/4 tons</u>				
1	Fore Top Sails,	Chain	300	1 3/4	Bower,	3
1	Fore Topmast Stay Sails,	Hempen Stream Cable	90	10 1/2		
1	Main Sails, <u>try sail</u>	Hawser	70	1	Stream,	1
1	Main Top Sails,	Towlines	90	8		
	and <u>six others</u>	Warp	90	15	Kedge,	2
		All of <u>good</u> quality.				

Her Standing and Running Rigging is of wire & hemp sufficient in size and good in quality.

She has one Long Boat and two other boats & two life boats

The present state of the Windlass is good Capstan & much and Rudder good Pumps good

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets

DATES of Surveys held while building, as per Section 17.

- 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 Built under Special Sur
- 3rd. When the beams were in and fastened, and before the decks were laid from October 22^d 1862
- 4th. When the ship was complete, and before the plating was finally coated to the present date
- 5th. After the ship was launched

The Poop & Forecastle of this ship have been connected by a spar deck and the requirements contained in Mr. Laing's letter of Dec^r 5th 1862 and yours of the 18th December have been fully carried out; all the frames extend to the string plate and reversed angle iron on alternate frames covering the butts to the same height (see mode of shifting set forth in sketch N^o 4) Mating of sides 1/4 and sheer strake of spar deck 3/4. 36 in wide and double rivetted at the main deck & waterway fitted & made water tight, the main sheer strake are doubled for 3/4 the entire length of the ship, and the whole of the workmanship is well executed

The Committee will perceive the anchors of this ship are rather light by the rules of which Mr. Laing has been apprized

In what manner are the surfaces preserved from oxidation? with Iron Paint & Peacock's patent and Portland cement in flat of bottom from bilge to bilge

I am of opinion this Vessel should be classed G. A. 1

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

Order No. 1319 Special£ 20 : 14 : "

Certificate (if required)£ : : : "

Committee's Minute 16th June

Character assigned A 1 for 9

Thos. B. Simey

Thos. W. Mason

This vessel having been originally intended to be built with a poop & fore-castle the floor plates are bolted "Spar decked" deep as the main spar deck with toping but this deficiency is compensated by fine Ribbands she is a strong vessel fit for the coast & cross passage.

12 June 1863