

IRON SHIPS.

No. *8922* Survey held at *London* Date *Dec 22 1866*
 on the *Iron Steamer "Charles Hood"* Master *W. Stocker*
 Tonnage under tonnage deck *651.00* Built at *London* When built *1866* Launched *24 Nov*
 Ditto of poop or spar deck *57.69* By whom built *M. Pile & Co.* Owners *Royal & Co.*
 Ditto of engine room *240.40* Total Register tonnage *511.21*
 Gross Tonnage *737.49* Port belonging to *London* Destined Voyage *Mediterranean*

Surveyed while Building, Afloat, or in Dry Dock *While Building, Afloat and in Dry Dock*

Length aloft *204* Extreme Breadth *30* Depth from top of Upper Deck Beam to top of Floor *17* Power of Engines *120* No. of Decks *Two at ends*

Dimensions of Ship per Register, length *205.9* breadth *32.1* depth *16.9*

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	<i>0 + 2 1/2</i>	<i>7 + 2 1/2</i>	Plates in Garboard Strakes, breadth and thickness	<i>30</i>	<i>10</i>
" if plate iron, breadth and thickness	<i>0 + 2 1/2</i>	<i>7 + 2 1/2</i>	Ditto from Garboard to upper part of Bilges	<i>9</i>	<i>9</i>
Stem, if bar iron, moulding and thickness	<i>0 + 2 1/2</i>	<i>7 + 2 1/2</i>	" from upper part of Bilge to a perpendicular height from upper side of Keel of 1/3 the entire depth of Hold	<i>0</i>	<i>0</i>
" if plate iron, breadth and thickness	<i>0 + 2</i>	<i>7</i>	" from 1/3 depth of Hold to lower edge of Sheerstrake	<i>7</i>	<i>7</i>
Stern-post, if bar iron, moulding and thickness	<i>0 + 2</i>	<i>7</i>	" Sheerstrake, breadth and thickness	<i>30</i>	<i>12</i>
" if plate iron, breadth and thickness	<i>0 + 2</i>	<i>7</i>	Butt Straps to outside plating, breadth and thickness	<i>4 1/2</i>	<i>10.9</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>28</i>	<i>28</i>	Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	<i>37</i>	<i>10</i>
Frames, Size of Angle Iron, single or double, for upper part of the ship	<i>1 3/4</i>	<i>4 1/2</i>	Angle Iron on ditto	<i>4 1/2</i>	<i>7</i>
" Reversed Iron, to every frame, and on every standard frame	<i>1 3/4</i>	<i>4 1/2</i>	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<i>10 + 9</i>	<i>10</i>
Floors, depth and thickness of Floor Plate at mid line	<i>19 1/2</i>	<i>19 1/2</i>	Diagonal Tie Plates on ditto	<i>9</i>	<i>10</i>
" Ditto ditto at Bilge Keelson	<i>0</i>	<i>0</i>	Planksheer, materials and scantlings	<i>0</i>	<i>0</i>
" Size of Reversed Angle Iron, and No. 1 & 2 at top of Floor Plate	<i>3 3/4</i>	<i>6</i>	Waterway ditto ditto	<i>0</i>	<i>0</i>
Beams, Deck (No. 16) double Angle Iron, Plate, Tee, or Bulb Iron	<i>4 1/2</i>	<i>7</i>	Flat of Upper Deck, thickness and material	<i>3 1/2</i>	<i>Red Pine</i>
" double or single Angle Iron, on upper edge	<i>3 1/2</i>	<i>6</i>	" how fastened to Beams	<i>With screw-bolt & nut</i>	<i>0</i>
" average space between	<i>at alternate frames</i>	<i>0</i>	Ceiling betwixt Decks and in Hold, thickness and material	<i>2 1/2</i>	<i>Red Pine</i>
" Hold, or Lower Deck (No. 24) double Angle, Tee, Plate, or Bulb Iron	<i>7 1/2</i>	<i>7</i>	Clamps or Spirketting ditto	<i>0</i>	<i>0</i>
" double or single Angle Iron on upper edge	<i>3 1/2</i>	<i>6</i>	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<i>22</i>	<i>0</i>
" average space between	<i>on 2nd and 4th frames</i>	<i>0</i>	Stringer or Tie Plates for Hatchways, on Deck Beams	<i>0</i>	<i>0</i>
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	<i>0</i>	<i>0</i>	Stringers in Hold	<i>0</i>	<i>0</i>
" Engine	<i>0</i>	<i>0</i>	Flat of Lower Deck, thickness and material	<i>0</i>	<i>0</i>
Keelson, single or double plate, box, or intercostal	<i>0</i>	<i>0</i>	Main piece of Rudder, diameter	<i>0</i>	<i>0</i>
" Size of Plates	<i>0</i>	<i>0</i>	" "	<i>0</i>	<i>0</i>
" Size of Angle Irons	<i>0</i>	<i>0</i>	(Can the Rudder be unshipped)	<i>0</i>	<i>0</i>
" Side, single or double, plate, box, or intercostal	<i>0</i>	<i>0</i>	Bulkheads, No. 1 Thick	<i>0</i>	<i>0</i>
" Bilge (No.) at each Bilge, single, or double, plate, or box	<i>0</i>	<i>0</i>	" Height up to main	<i>0</i>	<i>0</i>

Transoms, material *1/4 iron* or, if none, in what manner compensated for.

Knight-heads, and Hawse Timbers *none*

The Frames extend in one length from *Keel* to *Gunwale* rivetted through plates

The reverse angle irons on the floors extend in one length across the middle line from

" *on 1st & 2nd frames* " " *from* *and* *to* *the Gunwale*

Keelson, how are the various lengths of plates or angle irons connected? *With butt straps*

Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets (*2*)

" Edges from Garboards to upper part of bilge, worked clench, double or single rivetted; with rivets (*2*)

" Butts from Keel to turn of bilge, worked carvel with butt straps (*10 + 7/8*) thick, double or single

averaging (*1 1/2* ins.) apart. Do the butt straps lap over and rivet through

" Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clench, double or

averaging (*2 3/4* in.) apart. Do the butt straps lap over and rivet through

" Edges of Sheerstrake, double or single rivetted? At upper edge *and double*

" Butts from bilge to planksheers, worked carvel with butt straps (*10 + 7/8*) thick, double or single

averaging (*2 3/4* ins.) apart. Breadth of laps in double rivetting (*6*) Breadth of laps

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

Planksheer, how secured to the plating of the side Explain by sketch *see sketch*

Waterway " planksheer and to the Beams if necessary.

Deck Beams, how secured to the side? *The ones forward are rivetted to the frame*

Hold or Lower Deck ditto *The same as above, and part in this ship's side*

Paddle " " No. of br

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

Manufacturer's name or trade mark *By Bosthow & Vaughan, the plates by the*

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

Builder's Signature *M. Pile & Co.* Surveyor's Signature *John*

A ship. Are the rivetted edges and butts Do the edges of the curve Do the fillings between the ribs Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? well and sufficiently countersunk in the outer plate? Are there any rivets which either break into or have been put through the seams or butts of the plating?

the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double and a quarter times the diameter of the rivets where single rivetting is admitted? Yes butts lay close together throughout their length without requiring any making good of deficiencies? Yes in solid with single pieces? or are they in short lengths of various thicknesses? Solid with single pieces They do and are the rivet holes very 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.

The testing certificates of Anchors & Chain Cables have been produced, issued from the Sunderland public testing machine and signed by Mr. John Thompson James Spence

SHE HAS SAILS.		CABLES, &c., tested at		ANCHORS, tested at	
No.		No. on Chain	No. and date on Certificate	No.	No. on Anchor
Fore Sails,	Chain	498	270 1 1/2 40 1/2	Bowers	2203
Fore Top Sails,	Hemp	1088	60 1		2095
Fore Topmast	Stream Cable		80 7	Stream	2155
Stay Sails,	Hawser		80 10		
Main Sails,	Towline		80 8	Kedges	
Main Top Sails,	Warp		80 6		
	All of good quality.				

Her Standing and Running Rigging of Iron & Hemp sufficient in size and good in quality.

She has Two Life Boats Long Boat and three others The present state of the Windlass is sound, 2 Capstans 13 Winches and Rudder & Stern Pumps new and good

Order for Special Survey	DATES of	1st.	2nd.	3rd.	4th.	5th.
No. 1891	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 May 1966	while building					
Order for Ordinary Survey	as per					
No. 1891	Section 18.					
Date						

State if she has a Spar Deck No Poop 80' in length or Forecastle 20' in length.

General Remarks,

double to top of Bilge for upwards of half the length in ship, and has a double keelson, and short floor plates to every alternate frame as shown upon sketch from the fore bulk head, also from the after bulk head to the Engine Room. A length through the Engine and Boiler rooms is constructed with floor plates & boiler sleepers are shown on sketch, and at the ends with middle line also an extra side keelson. There are 4 feet lengths of angle iron at middle line, before and abaft the double frames. Before the boiler the frames are connected to the plate plates as shown on sketch, with fore and aft angle iron. Remarks of 15th Aug 1866 was not received until the Bilge stake marking that stake carefully it was found to be full 3/4 inch as near to 1/2 as to 3/4. Large angle iron was introduced as compensation. The brackets shown to with the frames, floor plate and outside plating. Aft the Engine room & off, the double bottom is made tight with flange plates and angle iron, as to maintain the longitudinal strength of the keelson by well overlapping the Engine and Boiler sleepers through the bulk heads. To compensate for the depth in the keelson the sheer strakes are increased 3/4 in thickness for 2/3 the Main Deck stringer plate 3/16.

red from oxidation? Inside By Cement to Bilge and Paint in other parts. Outside By Paint.

Classed B L

is received by me,

1866

February 18



LR-FAT 345-2

James Lawrence

The Remains of the ship are in good condition. The Bilge stake marking that stake carefully it was found to be full 3/4 inch as near to 1/2 as to 3/4. Large angle iron was introduced as compensation. The brackets shown to with the frames, floor plate and outside plating. Aft the Engine room & off, the double bottom is made tight with flange plates and angle iron, as to maintain the longitudinal strength of the keelson by well overlapping the Engine and Boiler sleepers through the bulk heads. To compensate for the depth in the keelson the sheer strakes are increased 3/4 in thickness for 2/3 the Main Deck stringer plate 3/16.