

4122 IRON SHIPS.

Rec 20/3/65
April to May 1865

No. 193 Survey held at Birkenhead Date 6th April
 on the "Golden Sunset" Master Lidmark
 Tonnage under tonnage deck 601.96 Built at Sunderland When built 1863 Launched 10th Nov 1860
 Ditto of Raise & Quake or spar deck 25.97 By whom built Loxford Owners Wilson & Chambers
 Ditto of engine room
 Total Register tonnage 627.93 Port belonging to Liverpool Destined Voyage Calcutta
 Surveyed while Building, Afloat, or in Dry Dock Onp - Glover & Co's dry dock

	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	No. of Decks
of Ship per Register, length	<u>172.2</u>		breadth <u>28.6</u>		depth <u>18.45</u>		
Plates in Garboard Strakes, breadth and thickness							Inches. In Ship. 16ths. In Ship. Inches. required per Rule. 16ths. required per Rule.
Ditto from Garboard to upper part of Bilges.							<u>26x 16</u> <u>16</u> <u>30</u> <u>11/16</u>
" from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3rds the entire depth of Hold							<u>10/16</u> <u>10/16</u> <u>9/16</u>
" from 2/3rds depth of Hold to lower edge of Sheerstrake							<u>10/16</u> <u>8 1/16</u> <u>7/16</u>
" Sheerstrake, breadth and thickness							<u>27</u> <u>12 1/16</u> <u>16</u> <u>30 x 10 1/16</u> <u>19 1/16</u>
Butt Straps to outside plating, breadth and thickness							<u>8 1/4 x 9 1/16</u> <u>12 1/16</u>
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness							<u>30</u> <u>8 1/16</u> <u>25 x 8 1/16</u>
Angle Iron on ditto							<u>28</u> <u>3 1/16</u> <u>4 1/2 x 3 1/2 x 7 1/16</u>
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways							<u>4 x 4 x 8 1/16</u> <u>4 1/2 x 3 1/2 x 7 1/16</u>
Diagonal Tie Plates on ditto							<u>10 1/2</u> <u>8 1/16</u> <u>10 1/2 x 8 1/16</u>
Planksheer, masts and scantlings							<u>None</u>
Waterway ditto ditto							<u>Gutter</u>
Flat of Upper Deck, thickness and material							<u>Waterway</u>
" " how fastened to Beams							<u>Plate 4</u> <u>3 1/2</u>
Ceiling betwixt Decks and in Hold, thickness and material							<u>Galv 2 screw bolts with nuts</u>
Clamps or Spicketing ditto							<u>Amor R Elm</u>
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness							<u>R Pine</u>
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams							<u>2 1/2</u>
Stringers in Hold							<u>Double A Iron</u>
Flat of Lower Deck, thickness and material							<u>None</u>
Main piece of Rudder, diameter at head							<u>4</u> <u>4 3/4</u>
" " at heel							<u>3 1/4</u> <u>2 3/4</u>
(Can the Rudder be unshipped afloat)							<u>Yes</u>
Bulkheads, No. 1 Thickness of							<u>6 1/16</u> per Rule <u>6 1/16</u>
" Height up							<u>Upper deck</u>
" how secured to the sides of the ship							<u>double frames</u>
" size of vertical angle irons and their distance apart							<u>4 x 3 x 7 1/16</u> and their distance apart <u>2 1/2 x 18 in</u>
" transverse do							<u>4 x 3 x 7 1/16</u> do <u>3 1/2</u>
" rivetted through plates with () rivets, about () apart.							<u>3/4</u> in. rivets, about (<u>6</u>) apart.

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

Plates, Garboard, double or single rivetted to keel, double or single at upper edge, with rivets (11 1/2 ins.) diameter, averaging (4 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 (9 1/16 to 12 1/16) 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? on alternate courses by sec. - daisy pieces

" 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? by secondary piece on alternate courses

" 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 (9 1/16 to 12 1/16) 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 (None)

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

Deck Beams, how secured to the side? by Butt Iron knees (22 x 9 1/16) welded to Beams & rivetted to frames

Hold or Lower Deck ditto do (22 x 8 1/16) do

Paddle " " No. of breasthooks 5 crutches 3

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?
 Manufacturer's name or trade mark Beam & Angle Iron makers Hopkins & Co Middlesbrough. Plating from the
Bridge. Stockton malleable Iron Co & Lewis Barnsley
 We certify that the above is a correct description of the several particulars therein given.

Builder's Signature _____ Surveyor's Signature W. C. Levey

IRON 438-0275

4122 *Lm*

Workmanship. Are the lands or laps of the cleanchwork 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? *Yes as far as possible*

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

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *not seen* and are the rivet holes well and sufficiently countersunk in the outer plate? *not seen*

Are there any rivets which either break into or have been put through the seams or butts of the plating? *none seen*

Her Masts, Bowsprit, Yards, &c., are in *apparently 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.

Lower Masts (Main & Fore) of Iron - Lower Yards of Steel, remainder of Spars of wood - - Main & Fore Masts 60 & 63 ft long by 2 1/2" plates 5/16" head 5/16". 3 angle irons 3 x 3. Butts double rivetted. Edges single rivetted. Bowsprit Iron. plates 5/16" A.I. 3 x 2 1/2 x 5/16. Lower Yards of Steel 60 ft by 1 1/2" plates 5/16" 5/16" with 2 angle irons 2 1/2 x 2 1/2 x 4/16. Edges single rivetted. Butts double rivetted.

She has SAILES.

CABLES, &c.

Private Test 10 - Nov 1863

ANCHORS, and their weights.

No.	Description	Chain	Pathoms.	Inches.	Tested to Tons.	Bowers,	No.	Weight.	Tested to Tons.
2	Fore Sails,	Chain	270	18 1/16	40 1/2		3	23.2.9	23.2.0
2	Fore Top Sails,	Hempen Stream Cable	80	1 3/16	10.12.2			24.2.20	26.9.1
2	Fore Topmast Stay Sails,	Hawser	90	9				22.1.16	22.13.2
2	Main Sails,	Towlines	90	16		Stream,		8.2.20	
2	Main Top Sails,	Warp	90	5		Kedges,		4.2.0	3.0.11
and two sets of other sails except Royals		All of <i>Good</i> quality.	90	5					

Her Standing and Running Rigging is *lower & new* sufficient in size and *good* in quality.

She has *a* Long Boat and *a* *pennace* & *a* *Gig*

The present state of the Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *4 No*

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought *After*

No. _____ Surveys held 2nd. On the plating during the progress of rivetting *Building*

Date _____ while building 3rd. When the beams were in and fastened, and before the decks were laid *Building*

Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated *Building*

No. _____ 5th. After the ship was launched *Building*

Date _____ Section 18. *Raised Quarter*

State if she has a *Spur* Deck *44 ft long* Peep _____ or Forecastle _____

General Remarks, *This vessel was purchased by the present owners after she was built and being desirous of having her classed in our Register have now submitted her for survey for that purpose in accordance with the Rules Sec 19 - In dry dock. outside surface of plating scraped and all oxidation removed, inside all the ceiling taken up and plating cleaned, plating bore for measurement of thicknesses. The results are recorded on the 7 page and compared with the Rules for the A grade with the following results. The upper frames are small in one flange but the frames are in thickness in excess. Flons 2 in less in depth but 7/16" thicker. Beams heavier. The main keelson in excess keelson and stringer angle iron in excess, outside plating in excess except four courses on each side next the garboard strakes which being diminished to forward and aft are in those parts light. She is double rivetted throughout. There are no diagonal ke plates on upper deck beams. The mast plates on lower deck are 4 feet wide and 14 ft long embracing 4 beams and a pair of diagonal ke plates have now been introduced on lower deck abreast the fore & main mast stringer plates on beam ends to each tier of beams wider than required by Rule. Main piece of Rudder small*

In what manner are the surfaces preserved from oxidation? Inside *Cement from keel to keel, above painted*

Ditto ditto Outside *True paint & one coat of Tallow & Palm oil*

In accordance with Rule Sec 19 we hereby respectfully submit the above Report

I am of opinion this Vessel should be Classed *for the Committee's consideration*

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

Man 1865 Special£ 12 : 12 : - *16/5/65*

Certificate (if required)£ - : 5 : -

Committee's Minute *25 May* 18*65*

Character assigned *B*

Wm. C. Lavery

Ed. Wheeler

Report to the Committee

April 19th May 1865

1865

