

4122 IRON SHIPS.

Rec 20/3/65
April to May 1865

No. 1934 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 1863
 Ditto of Raise & Quake or spar deck 25.97 By whom built Roaford 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 Ones - Glover & Co's dry dock

Feet.	Inches.	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	N ^o . of Decks
of Ship per Register, length <u>172.2</u> breadth <u>28.6</u> depth <u>18.45</u>									
Bar iron, depth and thickness <u>7 x 2 1/2</u> <u>7 x 2 3/4</u> if plate iron, breadth and thickness <u>7 x 2 1/2</u> <u>7 x 2 3/4</u> if bar iron, moulding and thickness <u>7 x 2 1/2</u> <u>7 x 2 3/4</u> if plate iron, breadth and thickness <u>7 x 2 1/2</u> <u>7 x 2 3/4</u> post, if bar iron, moulding and thickness <u>7 x 2 1/2</u> <u>7 x 2 3/4</u> if plate iron, breadth and thickness <u>7 x 2 1/2</u> <u>7 x 2 3/4</u> nce of Frames from moulding edge to moulding edge, all fore and aft <u>21</u> <u>21</u>					Plates in Garboard Strakes, breadth and thickness <u>26 x 1 1/2</u> <u>30</u> <u>10/16</u> Ditto from Garboard to upper part of Bilges <u>10/16</u> <u>10/16</u> from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold <u>10/16</u> <u>9/16</u> from 3/4ths depth of Hold to lower edge of Sheerstrake <u>10/16</u> <u>8 1/2 x 7/16</u> Sheerstrake, breadth and thickness <u>27</u> <u>12 x 1 1/2</u> <u>30 x 10/16</u> <u>10/16</u> Butt Straps to outside plating, breadth and thickness <u>8 1/2 x 9/16</u> <u>12/16</u> Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness <u>30</u> <u>8/16</u> <u>25 x 8/16</u> Angle Iron on ditto <u>4 x 4</u> <u>8/16</u> <u>4 1/2 x 3 1/2 x 7/16</u> Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways <u>10 1/2</u> <u>8/16</u> <u>10 1/2 x 8/16</u> Diagonal Tie Plates on ditto <u>None</u> Planksheer, masts and scantlings <u>Gutter</u> Waterway ditto ditto <u>Waterway</u> Flat of Upper Deck, thickness and material <u>Plank 4</u> <u>3 1/2</u> how fastened to Beams <u>Cal 2 screw bolts with nuts</u> Ceiling betwixt Decks and in Hold, thickness and material <u>Amer R Elm</u> <u>R Pine</u> <u>2 1/2</u> Clamps or Spicketing ditto <u>None</u> Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness <u>22</u> <u>8/16</u> <u>18 3/4</u> <u>8/16</u> Angle iron on ditto <u>5 x 3 x 8/16</u> <u>4 1/2 x 3 1/2 x 7/16</u> Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams <u>10</u> <u>8/16</u> <u>10 1/2 x 8/16</u> Stringers in Hold <u>Double A Iron</u> <u>5 x 3 x 8/16</u> <u>4 1/2 x 3 1/2 x 7/16</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> <u>1 1/4</u> at heel <u>3 1/4</u> <u>2 3/4</u> (Can the Rudder be unshipped afloat <u>Yes</u>) Bulkheads, N ^o . <u>1</u> Thickness of <u>9/16</u> per Rule <u>6/16</u> Height up <u>Upper deck</u> how secured to the sides of the ship <u>double frames</u> size of vertical angle irons <u>4 x 3 x 7/16</u> and their distance apart <u>2 1/2</u> <u>18 in</u> transverse do <u>4 x 3 x 7/16</u> do <u>do</u> rivetted through plates with <u>3/4</u> in. rivets, about <u>(6)</u> apart.				
Size of Angle Iron, single or double <u>4</u> <u>3</u> <u>8/16</u> <u>4</u> <u>3</u> <u>7/16</u> Reversed Iron, to every frame <u>3</u> <u>2 1/2</u> <u>6/16</u> <u>3</u> <u>2 3/4</u> <u>6/16</u> or every frame <u> </u> rs, depth and thickness of Floor Plate at mid line <u>19</u> <u>9/16</u> <u>19 1/2</u> <u>8/16</u> Ditto ditto at Bilge Keelson <u>19</u> <u>9/16</u> <u>19 1/2</u> <u>8/16</u> Size of Reversed Angle Iron, and No. at top of Floor Plate <u>3</u> <u>2 1/2</u> <u>6/16</u> <u>3</u> <u>2</u> <u>6/16</u> ns, Deck (N ^o .) double Angle Iron <u>7 1/2</u> <u>8/16</u> <u>7</u> <u>7/16</u> Plate, Tee, or Bulb Iron <u> </u> double or single Angle Iron on upper edge <u>3</u> <u>2 1/2</u> <u>6/16</u> <u>2 1/2</u> <u>2 1/2</u> <u>5/16</u> average space between <u>3 ft 6 ins</u> <u>3 ft 6 ins</u> Hold, or Lower Deck (N ^o .) double Angle Tee, Plate, or Bulb Iron <u>7</u> <u>9/16</u> <u>7</u> <u>7/16</u> double or single Angle Iron on upper edge <u>3</u> <u>2 1/2</u> <u>6/16</u> <u>3</u> <u>2 3/4</u> <u>6/16</u> average space between <u>3 ft 6 ins</u> <u>3 ft 6 ins</u> Paddle, sided and moulded, thickness of Plate size of Angle Iron <u> </u> Engine <u> </u> keelson, single or double plate, box or intercostal <u> </u> Size of Plates <u>2 1/2</u> Size of Angle Irons <u>see sketch above</u> <u>4 1/2 x 3 1/2 x 7/16</u> Side, single or double, plate box or intercostal <u> </u> Bilge (No. <u>one</u>) at each Bilge, <u>7 1/2</u> <u>8/16</u> <u>all fore & aft</u> Pull single or double, plate, or box <u>5</u> <u>3</u> <u>8/16</u> <u>4 1/2</u> <u>3 1/2</u> <u>7/16</u> ransoms, material or, if none, in what manner compensated for. <u> </u> ight-heads, and Hawse Timbers <u>Iron</u> e Frames extend in one length from <u>Keel</u> to <u>Gunwale</u> e reverse angle irons on the floors extend in one length across the middle line from <u> </u> to <u>Hold Beam knees</u> on the frames <u> </u> from <u> </u> and <u>gunwale alternately</u> keelson, how are the various lengths of plates or angle irons connected? <u>by butt straps</u> Plates, Garboard, double or rivetted to keel, double or at upper edge, with rivets <u>1 1/2</u> ins. diameter, averaging <u>(4 1/2)</u> ins. apart. Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets <u>(3/4)</u> in. diameter, averaging <u>(2 3/4)</u> ins. apart. Butts from Keel to turn of bilge, worked carvel with butt straps <u>9/16</u> to <u>1 1/2</u> thick, double or single rivetted; with rivets <u>(3/4)</u> in. diameter, averaging <u>(2 3/4)</u> ins. apart. Do the butt straps lap over and rivet through the lands of the strake below? <u>courses by sec - dary pieces</u> Edges from bilge to sheerstrake, worked carvel with a lining piece <u> </u> thick, or clencher, double or single rivetted; with rivets <u>(3/4)</u> in. diameter, averaging <u>(2 3/4)</u> ins. apart. Do the butt straps lap over and rivet through the lands of the strake below? <u>by secondary pieces on alternate courses</u> Edges of Sheerstrake, double or single rivetted? At upper edge <u>single</u> At lower edge <u>double</u> Butts from bilge to planksheers, worked carvel with butt straps <u>9/16</u> to <u>1 1/2</u> thick, double or single rivetted; with rivets <u>(3/4)</u> in. diameter, averaging <u>(2 3/4)</u> ins. apart. Breadth of laps in double rivetting <u>(4 1/2)</u> Breadth of laps in single rivetting <u>(none)</u> Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? <u>double rivetted</u> Planksheer, how secured to the plating of the sides <u>Explain by sketch</u> Waterway <u> </u> planksheer and to the Beams <u>if necessary</u> Deck Beams, how secured to the side? <u>by Bulb Iron knees (22 x 9/16) welded to Beams & rivetted to frames</u> Hold or Lower Deck ditto <u>do</u> <u>(22 x 8/16)</u> <u>do</u> Paddle <u> </u> No. of breasthooks <u>5</u> crutches <u>3</u> What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? <u>Beam & Angle Iron marked Hopkins & Co Middlesbrough. Plating from Thomas & Co. Stockton Middlesbrough & Iron Co & Leasowes Barnsley</u> Manufacturer's name or trade mark <u> </u> We certify that the above is a correct description of the several particulars therein given. <u>Will C. Slaney</u> Builder's Signature <u> </u> Surveyor's Signature <u> </u>									

IRON 438-0275

4122 *Lm*

Workmanship. Are the lands or laps of the clewwork 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? *solid 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 Spruce 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 SAILS.

CABLES, &c.

Private Test 10 - Nov 1863

ANCHORS, and their weights.

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

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

She has *a* Long Boat and *a* pinnace & a *Lig*

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 *Span* 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 17 page and compared with the Rules for the A grade with the following results. The upper frames are small in one place 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 Irons 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,

Special£ 12 : 12 : -

Certificate (if required)£ - : 5 : -

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

Character assigned *B*

Wm. C. Lavery
Ed. Wheeler
Referee to the Committee
19th May 1865
J. G. E.