

IRON SHIP.

(Rec'd. 2nd APL. 1883.)

No. 6054 Survey held at Glasgow Date, First Survey 17th Aug 1882 Last Survey 27th March 1883

On the

Screw Steamer "Elbe"

TONNAGE under } 680.29 ONE, OR TWO DECKED, THREE DECKED VESSEL,
Tonnage Deck }
Ditto of Third Spar } 6.81 SPAR, OR AWNING-DECKED VESSEL.
on Deck }
Ditto of Poop, } 49.81
Raised Or. Dk. }
Ditto of Houses } 14.06
on Deck }
Ditto of Forecastle } 23.34
Gross Tonnage } 744.30
Less Crew Space } 34.62
} 739.68
Less Engine Room } 247.78
Register Tonnage } 491.90
as cut on Beam }

Half Breadth (moulded) 14.42
Depth from upper part of Keel to top of Upper Deck Beams 14.42
Girth of Half Midship Frame (as per Rule) 29.08
1st Number 6092
1st Number, if a 3 Decked Vessel deduct 7 feet
Length 208.83
2nd Number 12422
Proportions— Breadths to Length 7.24
Depths to Length— Upper Deck to Keel 11.98
Main Deck ditto

Master Johnson
Built at Glasgow
When built 1883 Launched 10/2/83
By whom built Messrs Dobie & Co.
Owners Messrs Coverley & Widdow
Residence London
Port belonging to London
Destined Voyage Oporto
If Surveyed while Building, Afloat, or in Dry Dock,
Built under Special Survey.

LENGTH on deck as per Rule . . . 208.83 Feet. Inches. BREADTH Moulded . . . 28.84 Feet. Inches. DEPTH top of Floors to Upper Deck Beams . . . 15.96 Feet. Inches. Power of Engines . . . 98 Horse. N° of Decks with flat laid 2 N° of Tiers of Beams 2

Dimensions of Ship per Register, length, 210.0 breadth, 29.1 depth, 15.9

KEEL, depth and thickness 8 x 2 3/8 Inches in Ship. Inches per Rule. 8 x 2 3/8
STEM, moulding and thickness 4 x 2 3/8
STERN-POST for Rudder do. do. 4 x 4 3/4
" " for Propeller 4 x 4 3/4
Distance of Frames from moulding edge to moulding edge, all fore and aft 22
FRAMES, Angle Iron, for 3/4 length amidships . . . 3 1/2 x 3 1/2
Do. for 1/4 at each end 3 1/2 x 3 1/2
EVERSED FRAMES, Angle Iron 3 x 2 1/2
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships . . . 1 1/2 x 8
" thickness at the ends of vessel 8 3/4
" depth at 3/4 the half-bdth. as per Rule . . . 3 1/2
" height extended at the Bilges 3 1/2
BEAMS, Upper, Spar, or Awning Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } 4 x 5 6 6 1/2 5 6
Single or double Angle Iron on Upper edge }
Average space 44
BEAMS, Main, or Middle Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } 4 x 5 7 7 5 7
Single or double Angle Iron on Upper Edge }
Average space 44
BEAMS, Lower Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } 4 x 5 7 7 5 7
Single or double Angle Iron on Upper Edge }
Average space 44
BEAMS, Hold, or Orlop } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } 4 x 5 7 7 5 7
Single or double Angle Iron on Upper Edge }
Average space 44
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates . . . 13 10 13 10
" Rider Plate 9 5/8 10 9 5/8 10
" Bulb Plate to Intercoastal Keelson . . . 4 1/2 3 1/2 7 4 1/2 3 1/2 7
" Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7
" Double Angle Iron Side Keelson 5 5
" Side Intercoastal Plate (brass) 5 5
" do. Angle Irons
" Attached to outside plating with angle iron
BILGE Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7
" do. Bulb Iron 6 1/2 7 6 1/2 7
" do. Intercoastal plates riveted to plating for length
BILGE STRINGER Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7
Intercoastal plates riveted to plating for length
SIDE STRINGER Angle Irons

Flat Keel Plates, breadth and thickness
PLATES in Garboard Strakes, br'dth & thickness . . . 32 10 32 10
" From Garboard to upper part of Bilges . . . 9 x 8 9 x 8
" Of d'ble at Bilge, or increased thickness, and length applied half length
" From up. prt of Bilge to l. edge of Sh'rstake . . . 9 x 8 9 x 8
" Main Sheerstrake, breadth and thickness . . . 40 10 36 10
" Of d'ble at Sh'stk & lng. applied 3/4 length
" From M'n. to Up. or Spar Dk. Sh'rstake . . .
" Up. or Spar Dk. Sh'rstake, br'dth & thck'ns . . . 11/4 x 3 1/2 10 6 1/2 11/4 x 3 1/2 10 6 1/2
Butt Straps to outside plating, breadth & thickness 1 1/2 x 4 1/2 2 0 10 1 1/2 x 4 1/2 2 0 10
Lengths of Plating
Shifts of Plating, and Stringers
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness . . . 4 1/2 x 8 4 1/2 x 8
Angle Iron on ditto 4 1/2 x 3 1/2 4 1/2 x 3 1/2
Tie Plates fore and aft, outside Hatchways
Diagonal Tie Plates on Beams No. of Pairs
Flat of Up., Spar, or Awning Dk. * Yellow pine 3 1/2 3 1/2
How fastened to Beams
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness . . .
Is the Stringer Plate attached to the outside plating?
Angle Irons on ditto, No.
Tie Plates, outside Hatchways
Diagonal Tie Plates on Beams, No. of pairs
Flat of Middle Deck * do. do.
How fastened to Beams
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 24 7 24 7
Is the Stringer Plate attached to the outside plating? Yes
Angle Irons on ditto, No. 2 5 1/2 x 3 1/2 5 1/2 x 3 1/2
Stringer or Tie Plates, outside Hatchways . . . 10 8 10 8
Flat of Lower Deck * 3 M.P. 3
Fastened to Beams with nut & screw bolts
Ceiling betwixt Decks, thickness and material . . . 6 x 2 M.P.
" in hold do. do. 2 1/2 R.P. 2 1/2
Main piece of Rudder, diameter at head . . . 5 5
" do. at heel . . . 3 3
Can the Rudder be unshipped afloat? Yes
Bulkheads No. 4 No. per Rule 4
" Thickness of 5 1/6
" Height up Three to upper dk. after bulk? to height of m.t. flat
" How secured to sides of ship Double frame angle bars
" Size of Vertical Angle Irons 3 x 2 1/2 x 6 and distance apart 30 ins.
" Are the outside Plates doubled two spaces of Frames in length? Yes

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 6" apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to Gunwale and to top of angle bar alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 5/8 ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clench, double riveted; with rivets 7/8 in. diameter, averaging 15 1/2 ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 1 1/8 in. diameter averaging 3 1/2 x 3 ins. from centre to centre.

" Butts of Two Strakes at Bilge for half length, treble riveted with Butt Straps 1 1/6" thicker than the plates they connect.

" Edges from Bilge to Main Sheerstrake, worked clench, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 ins. from cr. to cr.

Lower Edget of Main Sheerstrake, double or single riveted.

" Butts of Main Sheerstrake, treble riveted for half length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

" Butts of Main Stringer Plate, treble riveted for half length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

" Breadth of laps of plating in double riveting 5 1/4 x 4 1/2 Breadth of laps of plating in single riveting

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble & Double No. of Breasthooks, 5 Crutches, 4

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Best

Manufacturer's name or trade mark, Messrs. Dobie & Co., Glasgow, Clydebank, Govan, & other works.

The above is a correct description.

Builder's Signature, Dobie & Co. Surveyor's Signature, J. R. House Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed* 6054 gls
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*
Are the fillings between the ribs and plates solid single pieces? *Yes*
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes*
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*
Do any rivets break into or through the seams or butts of the plating? *A few in the Butts*

Masts, Bowsprit, Yards, &c., are *Now* in *good* condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.
State also Length and Diameter of Lower Masts and Bowsprit *Length* *Dia. at Partners*

Pitch pine { Foremast 58' 6" 18 ins.
Mainmast 50' 6" 17 ins.

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.												
N ^o .	CABLES, &c.											
	Chain <i>1623/183</i>	240	1 7/16	3.55555 7.53718	240 x 1 7/16	<i>Checker</i> <i>A.S. Jack</i> <i>Subt.</i>	Bower Anchors	4295	18.0.4	19.1.0.0	18 cwt	
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)											
Fore Sails,	Iron Stream Chain	60 7/12	1 5/16	3.52370 7.515910	60 x 1 5/16	<i>Lipton</i> <i>A.S. Jack</i> <i>Subt.</i>		4294	14.3.5	18.4.1.0	18 "	
Fore Top Sails,	or Steel Wire ..							7296	15.1.4	16.5.1.0	15 1/2 "	
Fore Topmast Stay Sails,	Hempen Stream Cable ..							51.0 13			57 1/2 "	
Main Sails,	Towline, Hemp ..	90	3	3.51870	90 x 3	<i>Manly</i> <i>Certificate</i>	Stream Anchor	4294	6.2.7	8.16.1.0	6 1/2 "	
Main Top Sails,	Hawser <i>Hemp</i> ..	90	7 1/2		90 x 7 1/2		Kedge	4298	3.2.8	6.0.0.0	3 1/4 "	
and	Warp ..	90	5 1/2		90 x 5 1/2		2nd Kedge		1.2.0		1 1/2 "	
	quality <i>good</i>											

Standing and Running Riggings *Wire & Hemp* sufficient in size and *good* in quality. She has 2-24ft Long Boats and 1-24ft cutter & 1-20ft gig.
The Windlass is *Iron (this kind & Co's)* Capstan and Rudder *good* Pumps *Good* and as app. arrangement.

Engine Room Skylights.—How constructed? *Leak framing* How secured in ordinary weather? *Iron coming and bolts.*

What arrangements for deadlights in bad weather? *Solid shutters with bulls' eyes.*

Coal Bunker Openings.—How constructed? *Cast iron rims* How are lids secured? *Lockings* Height above deck? *Flush*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea?

Twelve water ports, eight scuppers, and four mowing pipes.

Cargo Hatchways.—How formed? *Deck plates forming Combing and Carling (Height above deck 34 inches)*

State size Main Hatch *18' 3" x 9' 0"* Forehatch *4' 0" x 16' 0"* Quarterhatch *14' 6" x 9' 0"* *may be main hatch*

If of extraordinary size, state how framed and secured? *Deck plates secured to beams and tie plates (Tie plates doubled in midship)*

What arrangement for shifting beams? *One deep web plate in Main hatch. One shifting beam in Quarterhatch*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>1761</i>	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	1882. Aug. 7, 20 28. Sept 5, 8, 12, 15, 20 & 28.
Date <i>9th June 1881</i>		2nd. On the plating during the process of riveting	Oct. 6, 11, 13, 16, 17, 19, 22, 24 & 31. Nov. 9, 14, 16, 21, 22
Order for Ordinary Survey No. <i>1761</i>		3rd. When the beams were in and fastened, and before the decks were laid....	28 & 29. Dec. 5, 7, 14, 21 & 28.
Date <i>✓</i>		4th. When the ship was complete, and before the plating was finally coated or cemented..	1883. Jan. 8, 16, 18, 23, 25 & 29. Feb. 5, 7, 10, 16, 20, 22, 23 & 28
No. <i>128</i> in builder's yard.		5th. After the ship was launched and equipped	March. 1, 6, 13, 15, 17, 20, 21, 22, 24, 26 & 27

General Remarks (State quality of workmanship, &c.) *The quality of workmanship and material is good.*

This Vessel has been built in conformity with the approved sections (3 A.) attached hereto, the instructions contained in the Secretary's letters dated 19th June 1882, and 18th January 1883, and otherwise in compliance with the Rules with a view to the class contemplated.

The collision bulkhead, the two deep water ballast tanks, and the after compartment have been tested as required by the Rules.

Two decked Vessel. Poop 29 1/2 feet, Bridge 4 1/2 feet, Forecastle 25 1/2 feet.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Paint and Cement* Outside *Paint*

I am of opinion this Vessel should be Classed *100 A 1*

The amount of the Entry Fee ... £ 5 : 0 : 0 is received by me, *19/3/1883*
10/- deducted overpaid £ 36 : 10 : "
on "Cumbrae" Report No. 6034 *Certificat*

(Travelling Expenses, if any, £ ..).
Committee's Minute *Tuesday 3rd April 1883.*

Character assigned *TRM 100 A 1*
at 100 A 1

J. J. Horne
Surveyor to Lloyd's Register of British and Foreign Shipping.

