

# IRON SHIP.

(Received at London Office, 3960)

No. **3940** Survey held at **Plymouth** Date, First Survey **Dec 16 1889** Last Survey **Feb 17 1890**

On the **Iron Bk "Sirena"**

**TONNAGE** under Tonnage Deck } **481**  
 Ditto of Third, Spar, or Awning Deck }  
 Ditto of Poop, or Raised Qr. Dk. }  
 Ditto of Houses on Deck }  
 Ditto of Forecastle }  
**Gross Tonnage** **523**  
 Less Crew Space }  
 Less Engine Room }  
**Register Tonnage** as cut on Beam }

**ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.**  
**Half Breadth** (moulded) . . . . . Feet.  
**Depth** from upper part of Keel to top of Upper Deck Beams  
**Girth** of Half Midship Frame (as per Rule) . . . . .  
**1st Number** . . . . .  
**1st Number, if a 3-Decked Vessel** . . . . . deduct 7 feet  
**Length** . . . . .  
**2nd Number** . . . . .  
**Proportions**— Breadths to Length . . . . .  
 Depths to Length—Upper Deck to Keel . . . . .  
 Main Deck ditto . . . . .

**Master** **A. H. Fox**  
**Built at** **Birkenhead**  
**When built** **1864** **Launched** **7m.**  
**By whom built** **G. R. Glover**  
**Owners** **A. H. Fox**  
**Residence**  
**Port belonging to** **Plymouth**  
**Destined Voyage** **not fixed**  
**If Surveyed while Building, Afloat, or in Dry Dock.**  
**Dry dock (G.W.)**

Official Number

LENGTH on deck as per Rule	Feet. Inches.		BREADTH—Moulded	Feet. Inches.		DEPTH top of Floors to Upper Deck Beams Do. do. Main Deck Beams	Feet. Inches.		Power of Engines	Horse.	N° of Decks with flat laid		N° of Tiers of Beams	
	153	4		27	4		17	5			one	2		
Dimensions of Ship per Register, length, breadth, depth,														
<b>KEEL</b> , depth and thickness	6 3/4 x 2 1/2		6 3/4 x 2 1/2		6 3/4 x 2 1/2		6 3/4 x 2 1/2							
<b>STEM</b> , moulding and thickness	6 3/4 x 2 1/2		6 3/4 x 2 1/2		6 3/4 x 2 1/2		6 3/4 x 2 1/2							
<b>STERN-POST</b> for Rudder do. do.	8 x 2 1/2		8 x 2 1/2		8 x 2 1/2		8 x 2 1/2							
" " for Propeller	—		—		—		—							
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23		23		23							
<b>FRAMES</b> , Angle Iron, for 2/3 length amidships	3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4							
Do. for 1/3 at each end	2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4							
<b>REVERSED FRAMES</b> , Angle Iron	2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4							
<b>FLOORS</b> , depth and thickness of Floor Plate at mid line for half length amidships	3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4							
" thickness at the ends of vessel	3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4							
" depth at 2/3 the half-bdth. as per Rule	3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4							
" height extended at the Bilges	3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4		3 1/2 x 2 3/4							
<b>BEAMS, Upper, Spar, or Awning Deck</b>	7/8 x 7/16		7/8 x 7/16		7/8 x 7/16		7/8 x 7/16							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4							
Single or double Angle Iron on Upper edge	46		46		46		46							
Average space	46		46		46		46							
<b>BEAMS, Main, or Middle Deck</b>	7/8 x 7/16		7/8 x 7/16		7/8 x 7/16		7/8 x 7/16							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4							
Single or double Angle Iron, on Upper Edge	46		46		46		46							
Average space	46		46		46		46							
<b>BEAMS, Lower Deck</b>	7/8 x 7/16		7/8 x 7/16		7/8 x 7/16		7/8 x 7/16							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4							
Single or double Angle Iron on Upper Edge	46		46		46		46							
Average space	46		46		46		46							
<b>BEAMS, Hold, or Orlop</b>	7/8 x 7/16		7/8 x 7/16		7/8 x 7/16		7/8 x 7/16							
Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4		2 3/4 x 2 3/4							
Single or double Angle Iron on Upper Edge	46		46		46		46							
Average space	46		46		46		46							
<b>KEELSONS</b> Centre line, single or double plate, box, or Intercostal Plates	14 1/2 x 7/8		14 1/2 x 7/8		14 1/2 x 7/8		14 1/2 x 7/8							
" Rider Plate	4 x 3		4 x 3		4 x 3		4 x 3							
" Bulb Plate to Intercostal Keelson	4 x 3		4 x 3		4 x 3		4 x 3							
" Angle Irons	4 x 3		4 x 3		4 x 3		4 x 3							
" Double Angle Iron Side Keelson	4 x 3		4 x 3		4 x 3		4 x 3							
" Side Intercostal Plate	4 x 3		4 x 3		4 x 3		4 x 3							
" do. Angle Irons	4 x 3		4 x 3		4 x 3		4 x 3							
" Attached to outside plating with angle iron	4 x 3		4 x 3		4 x 3		4 x 3							
<b>BILGE</b> Angle Irons	4 x 3		4 x 3		4 x 3		4 x 3							
" do. Bulb Iron	4 x 3		4 x 3		4 x 3		4 x 3							
" do. Intercostal plates riveted to plating for length	4 x 3		4 x 3		4 x 3		4 x 3							
<b>BILGE STRINGER</b> Angle Irons	4 x 3		4 x 3		4 x 3		4 x 3							
Intercostal plates riveted to plating for length	4 x 3		4 x 3		4 x 3		4 x 3							
<b>SIDE STRINGER</b> Angle Irons	4 x 3		4 x 3		4 x 3		4 x 3							

Flat Keel Plates, breadth and thickness ... 10/16  
**PLATES** in Garboard Strakes, br'dth & thickness ... 10/16  
 " From Garboard to upper part of Bilges ... 10/16  
 " Of d'bling at Bilge, or increased thickness, and length applied }  
 " From up. prt of Bilge to l. edge of Sh'rstrake ... 10/16  
 " Main Sheerstrake, breadth and thickness ... 10/16  
 " Of d'bling at Sh'stk. & Ing. applied }  
 " From M'n. to Upr. or Spar Dk. Sh'rstrake ... 10/16  
 " Up. or Spar Dk Sh'rstrake, br'dth & thickn'ss ... 10/16  
 Butt Straps to outside plating, breadth & thickness  
 Lengths of Plating  
 Shifts of Plating, and Stringers  
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ... 3 1/2  
 Angle Iron on ditto ... 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.\*  
 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 ...  
 Is the Stringer Plate attached to the outside plating?  
 Angle Irons on ditto, No.  
 Stringer or Tie Plates, outside Hatchways ...  
 Flat of Lower Deck\*  
 Ceiling betwixt Decks, thickness and material ... 2 1/2 red pine  
 " in hold do. do. ...  
 Main piece of Rudder, diameter at head ...  
 do. at heel ...  
 Can the Rudder be unshipped afloat?  
 Bulkheads No. 1 No. per Rule  
 " Thickness of 5/16  
 " Height up  
 " How secured to sides of ship by double frame  
 " Size of Vertical Angle Irons 3 x 3 1/2 and distance apart 2'-6" ins.  
 " Are the outside Plates doubled two spaces of Frames in length?

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 in 2 middle line to length of hold beam  
**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 1/4 in. diameter, averaging 4 1/4 ins. from centre to centre.  
 " **Edges of Garboards** and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 2 3/4 ins. from centre to centre.  
 " **Butts from Keel to turn of Bilge**, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 3/4 ins. from centre to centre.  
 " **Butts of** Strakes at Bilge for length, treble riveted with Butt Straps thicker than the plates they connect.  
 " **Edges from Bilge to Main Sheerstrake**, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 2 3/4 ins. from cr. to cr.  
 " **Butts from Bilge to Main Sheerstrake**, worked carvel, double riveted; with rivets in. diameter, averaging ins. from cr. to cr.  
 " **Edges of Main Sheerstrake**, double or single riveted. **Double Upper Sheerstrake**, double or single riveted.  
 " **Butts of Main Sheerstrake**, treble riveted for length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.  
 " **Butts of Main Stringer Plate**, treble riveted for length amidships. **Butts of Upper or Spar Stringer Plate**, treble riveted for length.  
 " Breadth of laps of plating in double riveting Breadth of laps of plating in single riveting  
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? **Double** No. of Breasthooks, Crutches,  
 What description of Iron is used for Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?  
 Manufacturer's name or trade mark.  
 The above is a correct description.  
 Builder's Signature, Surveyor's Signature, **W. M. Dava**  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Form No. 1 for Iron Ships—(4000—16/11/82.)

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel

\* If Iron Deck, state if whole or part, and if wood deck is laid thereon

**Workmanship.** Are the butts of plating planed or otherwise fitted?

Do the edges of the <sup>clew</sup> ~~cover~~ 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? *solid*

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *-*

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *-*

Do any rivets break into or through the seams or butts of the plating? *-*

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

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
25 Wire	SAILS.	CABLES, &c.										
	Fore Sails,	Chain										
	Fore Top Sails,	Iron Stream Chain										
	Fore Topmast Stay Sails,	or Steel Wire										
	Main Sails,	or Hempen Strm Cable										
	Main Top Sails, and	Towline, Hemp.										
		or Steel Wire										
		Hawser										
		Warp										
		quality										
		Standing and Running Rigging										
		The Windlass is										
		Engine Room Skylights.										
		Coal Bunker Openings.										
		Scuppers, &c.										
		Cargo Hatchways.										
		State size Main Hatch										
		Forehatch										
		Quarterhatch										
		Hatches, If strong and efficient?										

*Sufficient & according to Rule*

Bower Anchors 3  
Stream Anchor 1  
Kedge ... 1  
2nd Kedge ... 1

is sufficient in size and *good* in quality. She has *one* Long Boat and *two* life boats. The Windlass is *good* Capstan *good* and Rudder *good* Pumps *2 n.*

How constructed? *-* How secured in ordinary weather? *-*  
 How are lids secured? *-* Height above deck? *-*  
 What arrangements for clearing upper deck of water, in case of shipping a sea? *Treey ports with flaps*  
 How formed? *of iron*  
 State size Main Hatch Forehatch Quarterhatch  
 If of extraordinary size, state how framed and secured?  
 What arrangement for shifting beams?  
 Hatches, If strong and efficient? *yes*

Order for Special Survey No.	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	<i>From Dec 16th 1889 to Feb 17th 1890</i>
Date		2nd. On the plating during the process of riveting	
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....	
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..	
No. in builder's yard.		5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) *The scantlings were taken show but slight reduction from original thickness of the vessel is in a good & efficient condition & eligible in my opinion to retain her class.*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)  
 How are the surfaces preserved from oxidation? Inside *Paint* Outside *Paint*

I am of opinion this Vessel should be Classed *\*A 1*  
 The amount of the Entry Fee .....£ 3 : 0 : is received by me, *£6-18/-*  
 Special .....£ 3 : 3 : *4613 1890*  
 (to be sent as per margin). Certificate *50*  
 (Travelling Expenses, if any) *Spar Make*

*W. M. Davy*  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute  
 Character assigned

Reference should be made to any correspondence connected with the case.

Surveys may be reported and to be written up or below the space for Committee's Minute.

