

# IRON SHIPS.

Rec 20/1/68

No. 9216 Survey held at London Date January 18th 1860  
 on the Screw Steamer "Dacia" Master Dowell  
 Tonnage under tonnage deck 105 1/2  
 Ditto of poop or spar deck 2 1/2  
 Ditto of engine room 4 1/2  
 Total Register tonnage 112 1/2  
 Gross Tonnage 157 1/2 Port belonging to London Destined Voyage Alexandria  
 Surveyed while Building Afloat, or in Dry Dock

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.	No. of Decks
243 1/4	4		34 1/2	9		14 1/2	11 1/2		170		Five
(Dimensions of Ship per Register, length 243 1/4 breadth 34 1/2 depth 14 1/2 Upper Deck 7 1/2)											
Keel, if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule.		Plates in Garboard Strakes, breadth and thickness		Inches in Ship.		16ths in Ship.		Inches required per Rule.
" if plate iron, breadth and thickness	0 1/2 x 3		0 1/2 x 3		Ditto from Garboard to upper part of Bilges		"		11		11
Stem, if bar iron, moulding and thickness	0 1/2 x 3		0 1/2 x 3		" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		"		10		10
" if plate iron, breadth and thickness	10 1/2 x 4 1/2				" from 3/4ths depth of Hold to lower edge of Sheerstrake		"		10		9
Stern-post, if bar iron, moulding and thickness	2 1/2		2 1/2		" Sheerstrake, breadth and thickness		36		11		See Deck Plan
" if plate iron, breadth and thickness					Butt Straps to outside plating, breadth and thickness		2 1/2 x 0 1/2		2 1/2 x 0 1/2		2 1/2 x 0 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	Inches in Ship.		Inches required per Rule.		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		34		12		34
Frames, Size of Angle Iron, single or double	5 3		5 3		Angle Iron on ditto		5 x 4 1/2		9		5 x 4 1/2
" Reversed Iron, 1/4 to every frame	2 1/2		2 1/2		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		10 1/2		10		10 1/2
" or every alternate frame	2 1/2		2 1/2		Diagonal Tie Plates on ditto		12 1/2		10		12 1/2
Floors, depth and thickness of Floor Plate at mid line	25		10		Planksheer, materials and scantlings		ditto		ditto		ditto
" Ditto ditto at Bilge Keelson	10		10		Waterway ditto		ditto		ditto		ditto
" Size of Reversed Angle Iron, and No. double at top of Floor Plate	3 1/2		3		Flat of Upper Deck, thickness and material		3 1/2		Pine		4
Beams, Deck (No. 44) double Angle Iron, Plate, Tee, or Bulb Iron	0 1/2		0		" how fastened to Beams		with screw bolts and nuts				
" " double or single Angle Iron, on upper edge	3 1/4		3		Ceiling betwixt Decks and in Hold, thickness and material		3 to 5		Red Pine		
" " average space between	on every alternate frame				Clamps or Spirketting ditto		ditto				
" Hold, or Lower Deck (No. 30) double Angle, Tee, Plate, or Bulb Iron	0 1/2		0		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		26		10		26
" " double or single Angle Iron, on upper edge	3 1/4		3		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		12 1/2		10		12 1/2
" " average space between	on every 2nd and 4th frame				Stringers in Hold		5 1/2 x 4 1/2		9		5 1/2 x 4 1/2
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	16 1/2		13		Flat of Lower Deck, thickness and material		6 1/2		6 1/2		
" Engine " " " "	5 1/2		4 1/2		Main piece of Rudder, diameter at head		6 1/2		6 1/2		
Keelson, single or double plate, box, or intercostal	11 x 10		6		" " " at heel		3 1/2		3 1/2		
" Size of Plates	5 1/2		4 1/2		(Can the Rudder be unshipped afloat)		Yes				
" Size of Angle Irons	11 x 10		6		Bulkheads, No. 5 Thickness of		0 1/2				
Side, single or double plate, box, or intercostal	11 x 10		6		" Height up		To Main Deck				
" Bilge (No. 1) Angle Irons on each Bilge, single, or double, plate, or box	5 1/2		4 1/2		" how secured to the sides of the ship		between double frames				
Transoms material of iron, or, if none, in what manner compensated for.	11 x 10		6		" size of vertical-angle irons		3 1/2 x 3 1/2		and their distance apart		30
Knight-heads, and Hawse Timbers	11 x 10		6		The Frames extend in one length from		Keel		to		Upper deck stringer
The Frames extend in one length from	11 x 10		6		The reverse angle irons on the floors extend in one length across the middle line from		Keel		to		above the Main Deck stringer on
The reverse angle irons on the floors extend in one length across the middle line from	11 x 10		6		" all the " on the frames " " " from		Keel		to		the upper deck stringer on alternate frames
" all the " on the frames " " " from	11 x 10		6		Keelson, how are the various lengths of plates or angle irons connected?		with butt straps double angle irons at top & bottom well shifted				
Keelson, how are the various lengths of plates or angle irons connected?	11 x 10		6		Plates, Garboard, double or rivetted to keel, double or		at upper edge, with rivets (7/8 in.) diameter, averaging (4 1/2 in.) apart.				
Plates, Garboard, double or rivetted to keel, double or	11 x 10		6		" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.						
" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.	11 x 10		6		" Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/2 in.) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.						
" Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/2 in.) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.	11 x 10		6		" Edges from bilge to sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.						
" Edges from bilge to sheerstrake, worked carvel with a lining piece ( ) thick, or clencher, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart.	11 x 10		6		" Edges of Sheerstrake, double or single rivetted; At upper edge and At lower edge						
" Edges of Sheerstrake, double or single rivetted; At upper edge and At lower edge	11 x 10		6		" Butts from bilge to planksheers, worked carvel with butt straps (1 1/2 in.) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart. Breadth of laps in double rivetting (5 in.) Breadth of laps in single rivetting (3 in.)						
" Butts from bilge to planksheers, worked carvel with butt straps (1 1/2 in.) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 in.) apart. Breadth of laps in double rivetting (5 in.) Breadth of laps in single rivetting (3 in.)	11 x 10		6		Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?		Double rivetted				
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	11 x 10		6		Planksheer, how secured to the plating of the sides		Explain by sketch		Please see sketch sent herewith		
Planksheer, how secured to the plating of the sides	11 x 10		6		Waterway " " planksheer and to the Beams		if necessary.				
Waterway " " planksheer and to the Beams	11 x 10		6		Deck Beams, how secured to the side?		With knee plates		The upper deck beams turned down at mid & rivetted to the frames		
Deck Beams, how secured to the side?	11 x 10		6		Hold or Lower Deck ditto		The same as Deck Beams				
Hold or Lower Deck ditto	11 x 10		6		Paddle " " "						
Paddle " " "	11 x 10		6		No. of breasthooks		Five		crutches		Five
No. of breasthooks	11 x 10		6		What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?		The frames, beams, keelsons, tie and stringer plates		outside plating by Birkbeck, (Birmingham) & Co. and the stringer plates by the Foundry, London		
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?	11 x 10		6		Manufacturer's name or trade mark		Birkbeck, (Birmingham) & Co.				
Manufacturer's name or trade mark	11 x 10		6		We certify that the above is a correct description of the several particulars therein given.						
We certify that the above is a correct description of the several particulars therein given.	11 x 10		6		Builder's Signature		James Caird		Surveyor's Signature		James Caird
Builder's Signature	11 x 10		6		Surveyor's Signature		James Caird				

IRON 441-0416



5963 Iron

**Workmanship.** Are the lands or laps of the clenchwork 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? They are  
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  
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Solid with single pieces  
Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? They are  
Are there any rivets which either break into or have been put through the seams or butts of the plating? 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.

N <sup>o</sup> .	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N <sup>o</sup> .	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
<i>the full suit</i>	Fore Sails,	Chain .....	300	1 1/2	55 1/8	1 1/2	55 1/8	Bowers .....	1	30.0.14	28.14.1.14	30.0.0	28.14.1.14
	Fore Top Sails,								1	30.0.8	28.13.1.12	30.0.0	28.13.1.12
	Fore Topmast Stay Sails	Hempen Stream Cable	90	10				Stream .....	1	26.1.0	25.16.1.0	25.2.0	25.16.1.0
	Main Sails,	Hawser .....	90	1									
	Main Top Sails,	Towlines .....	90	7 1/2									
		Warp .....	90	6 1/2				Kedges .....	1	6.3.0			
		All of <u>good</u> quality.	90	5 1/2						3.0.10			

Her Standing and Running Rigging Well Shunk sufficient in size and good in quality.  
She has 2 Life Boats Long Boat and five others  
The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good

Order for Special Survey	DATES of	1st. On the several parts of the frame, when in place, and before the plating was wrought	<u>Built under</u>
No. <u>1997</u>	Surveys held	2nd. On the plating during the progress of rivetting	<u>Special Survey</u>
Date <u>Aug 17/67</u>	while building	3rd. When the beams were in and fastened, and before the decks were laid	<u>from June 25/67</u>
Order for Ordinary Survey	as per	4th. When the ship was complete, and before the plating was finally coated	<u>to the present</u>
No. <u>    </u>	Section 18.	5th. After the ship was launched	<u>date</u>
Date <u>    </u>			

State if she has a Spar Deck Yes Poop      or Forecastle     

**General Remarks,** Spar Deck. The beams are of bulb iron 6 1/2 x 9/8 spaced at every alternate frame with double angle irons on upper edge 2 1/2 x 2 1/2 x 5/8. The stringer plates on their sides are 30 x 1 1/8 and angle irons on do 4 1/2 x 3 1/2 x 5/8. The fore and aft tie plates 9 1/2 x 7/8. Five pairs of diagonal plates 4 1/2 x 7/8. The sheer strakes are 4 1/2 x 1 1/8 and angled for upward of 1/4 of length with 1/2 plates 35 1/2 wide, the stake between sheer strakes is 1/16. The thickness of Main and Spar Decks have been reversed, the spar deck being 4 1/2 Pine, Main do 3 1/2. The accompanying sketch has been submitted by Mr. Lang for the sanction of Committee, and received their approval, (see Sec<sup>t</sup> meeting of the 26<sup>th</sup> March last) the principal Surveyors recommendations contained therein have been complied with.  
The gross Tonnage of this vessel exceeds the calculation of the Builder, in consequence of which the angle irons of Keelsons are less than the rules require this deficiency is in my opinion compensated for by the number of Keelsons exceeding those required by the Rules.

Testing certificates of the Chain cables and Anchor  
received from the Sunderland Patent Testing House  
and signed by Mr. John Thompson, have been  
produced.

In what manner are the surfaces preserved from oxidation? Inside By cement & Mergel, and by Paint above  
Ditto ditto Outside By Paint

I am of opinion this Vessel should be Classed A 1  
The amount of the Fee .....£ 5 : : : is received by me,  
Jan<sup>r</sup> WMC Special .....£ 70 : 17 : :  
Certificate (if required) .....£ : : : :  
2/68

Committee's Minute 21<sup>st</sup> January 18 68

Character assigned A 1  
A & C P  
Spar decked WMS

Thomas Lawrence

This Spar Deck Vessel is  
in my opinion fit for the Class  
Recommended above  
WMS  
A 1  
20.1.68  
Lloyd's Register  
Foundation