

# IRON SHIPS.

Rec 5/11/66

No. 10115 Survey held at Newcastle Date 17<sup>th</sup> April to 3<sup>rd</sup> Nov 18 66  
 on the S.S. "Dagmar" Master Langley  
 Tonnage under tonnage deck 652.90 Built at Newcastle When built 1866 Launched 27<sup>th</sup> Sept 1866  
 Ditto of poop or spar deck  
 Ditto of engine room 208.93 By whom built A. Leslie & Co Owners Anglo Danish Company  
 Total Register tonnage 443.97  
 Gross Tonnage 652.90 Port belonging to London Destined Voyage Copenhagen  
 Surveyed while Building, Afloat, or in Dry Dock While building

Length aloft 210.4 Extreme Breadth 28.2 Depth from top of Upper Deck Beam to top of Floor 15.1 Power of Engines 90 No. of Decks one

(Dimensions of Ship per Register, length 210.4 breadth 28.2 depth 14.9)

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.		Inches in Ship.	16ths in Ship.	Inches required per Rule.	16ths required per Rule.
Keel, if bar iron, depth and thickness	<u>7 x 2 3/4</u>	<u>7 x 2 3/4</u>			Plates in Garboard Strakes, breadth and thickness	<u>31</u>	<u>7/16</u>	<u>30</u>	<u>7/16</u>
„ if plate iron, breadth and thickness	<u>7 x 2 3/4</u>	<u>7 x 2 3/4</u>			Ditto from Garboard to upper part of Bilges		<u>9/16</u>		<u>9/16</u>
Stem, if bar iron, moulding and thickness	<u>7 x 2 3/4</u>	<u>7 x 2 3/4</u>			„ from upper part of Bilge to a perpendicular height from upper side of Keel of 2/3 the entire depth of Hold		<u>9/16</u>		<u>9/16</u>
„ if plate iron, breadth and thickness	<u>8 7/8 x 4 1/2</u>	<u>7 x 5 1/2</u>			„ from 2/3 the depth of Hold to lower edge of Sheerstrake		<u>7/16</u>		<u>7/16</u>
Stern-post, if bar iron, moulding and thickness					„ Sheerstrake, breadth and thickness	<u>38</u>	<u>10/16</u>	<u>30</u>	<u>9/16</u>
„ if plate iron, breadth and thickness					Butt Straps to outside plating, breadth and thickness	<u>9 1/2</u>	<u>5/8</u>	<u>10/16</u>	<u>7/16</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>21</u>			Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	<u>38</u>	<u>9/16</u>	<u>29 1/2</u>	<u>8/16</u>
Frames, Size of Angle Iron, single or double	<u>4</u>	<u>3</u>	<u>7/16</u>	<u>4</u>	Angle Iron on ditto	<u>4 1/2 x 3 1/2</u>	<u>7/16</u>	<u>4 1/2 x 3 1/2</u>	<u>7/16</u>
„ Reversed Iron, if to every frame or every frame	<u>3</u>	<u>2 3/4</u>	<u>4/16</u>	<u>3</u>	Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<u>11</u>	<u>8/16</u>	<u>10 1/2</u>	<u>9/16</u>
Floors, depth and thickness of Floor Plate at mid line	<u>1 1/2</u>	<u>8/16</u>	<u>4/16</u>	<u>1 1/2</u>	Diagonal Tie Plates on ditto	<u>11</u>	<u>8/16</u>	<u>10 1/2</u>	<u>9/16</u>
„ Ditto ditto at Bilge Keelson	<u>9 1/2</u>				Planksheer, materials and scantlings				
„ Size of Reversed Angle Iron, and No. 1 at top of Floor Plate	<u>3</u>	<u>2 3/4</u>	<u>4/16</u>	<u>3</u>	Waterway ditto ditto				
Beams, Deck (No. 45) double Angle Iron, Plate, Tee, or Bulb Iron	<u>7</u>	<u>7/16</u>		<u>7</u>	Flat of Upper Deck, thickness and material	<u>3 1/2</u>	<u>Yellow pine</u>		
„ double or single Angle Iron, on edge	<u>2 1/2</u>	<u>2 1/2</u>	<u>9/16</u>	<u>2 1/2</u>	„ how fastened to Beams		<u>Butt &amp; screw bolts</u>		
„ average space between	<u>3 feet</u>	<u>6 inches</u>			Ceiling betwixt Decks and in Hold, thickness and material	<u>2 1/2</u>	<u>Oak</u>	<u>8 in to bilge</u>	
Hold, or Lower Deck (No. 28) double Angle, Tee, Plate, or Bulb Iron	<u>7</u>	<u>7/16</u>		<u>7</u>	Clamps or Spirketting ditto				
„ double or single Angle Iron, on edge	<u>3</u>	<u>2 3/4</u>	<u>4/16</u>	<u>3</u>	Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<u>22</u>	<u>8/16</u>	<u>22</u>	<u>9/16</u>
„ average space between	<u>2 1/2</u>	<u>4</u>	<u>frames</u>		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	<u>4 1/2 x 3 1/2</u>	<u>7/16</u>	<u>4 1/2 x 3 1/2</u>	<u>7/16</u>
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron					Stringers in Hold	<u>4 1/2 x 3 1/2</u>	<u>7/16</u>	<u>4 1/2 x 3 1/2</u>	<u>7/16</u>
„ Engine					Flat of Lower Deck, thickness and material				
Keelson, single or double plate, box, or intercostal	<u>22</u>	<u>8/16</u>		<u>22</u>	Main piece of Rudder, diameter at head	<u>5</u>		<u>4 3/4</u>	
„ Size of Plates	<u>7 1/4</u>	<u>7/16</u>			„ at heel	<u>3</u>		<u>2 3/4</u>	
„ Size of Angle Irons	<u>4 1/2</u>	<u>3 1/2</u>	<u>7/16</u>	<u>4 1/2</u>	(Can the Rudder be unshipped afloat) <u>Yes</u>				
„ Side, single or double, plate, box, or intercostal	<u>4 1/2</u>	<u>3 1/2</u>	<u>7/16</u>	<u>4 1/2</u>	Bulkheads, No. <u>6</u> Thickness of <u>5/16</u>				
„ Bilge (No. 1) at each Bilge, single, or double, plate, or box	<u>4 1/2</u>	<u>3 1/2</u>	<u>7/16</u>	<u>4 1/2</u>	„ Height up <u>5 to main deck</u> After one to hold beams, then deduct over				
Transoms, material <u>plate</u> or, if none, in what manner compensated for.					„ how secured to the sides of the ship <u>double frames</u>				
Knight-heads, and Hawse Timbers	<u>Plate</u>				„ size of vertical angle irons <u>3 x 2 1/2 x 1/2</u> and their distance apart <u>30 inches</u>				

The Frames extend in one length from Keel to gunwale rivetted through plates with (3/4 in.) rivets, about (5 1/2) apart

The reverse angle irons on the floors extend in one length from the middle line from to hold to beam knee plates and  
 „ „ „ on the frames „ „ „ from to alternate frames to deck

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

Plates, Garboard, double or rivetted to keel, double or and at upper edge, with rivets (1/8 in.) diameter, averaging (4 1/2 in.) 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 in.) apart.

„ Butts from Keel to turn of bilge, worked carvel with butt straps (10 to 9/16) thick, 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? no

„ 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? no

„ 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 (9/16 x 7/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 3/4 in.) apart. Breadth of laps in double rivetting (4 1/2 x 4 1/2) Breadth of laps in single rivetting ( )

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 } Butt Waterway  
 Waterway „ „ planksheer and to the Beams { if necessary. }

Deck Beams, how secured to the side? Bracket ends

Hold or Lower Deck ditto ditto

Paddle „ „ No. of breasthooks 4 crutches 4

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

Manufacturer's name or trade mark Plate and angle iron, marked, "Palmer's best Sarnow."

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature Andrew Leslie Ho Surveyor's Signature James Skinner



5144 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? 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  
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? generally so and are the rivet holes well and sufficiently countersunk in the outer plate? Yes  
Are there any rivets which either break into or have been put through the seams or butts of the plating? a 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.

"Lloyd's Type" proving house						"Lloyd's Type" proving house						
She has SAILS.		CABLES, &c., tested at <u>Robt. Burrall Supt</u>				ANCHORS, tested at <u>(Signed) Robt. Burrall Supt</u>						
N <sup>o</sup> .		No. on Chain seen by me.	No. and date on Certificate	Fathoms.	Inches.	Tested to. Tons.	N <sup>o</sup> .	No. on Anchor seen by me.	No. and date on Certificate.	Weight. Ex. stock.	Tested to. Tons.	
Fore Sails,	Chain .....	1719	1719-5.10.66	180	1 3/8	34.0.0.0	Bowers .....	1	3870	3870-7.9.66	17.0.17	18.8.3.0
Fore Top Sails,	Hempen	1704	1704-25.9.66	60	1 3/8	34.0.0.0		1	3863	3863-4.9.66	16.3.0	18.0.2.14
Fore Topmast Stay Sails,	Stream Cable			60	3/4			1	3862	3862-4.9.66	15.0.21	15.14.1.14
Main Sails,	Hawser .....			90	8 1/2		Stream .....	1			7.0.21	
Main Top Sails,	Towlines .....			90	6		Kedges .....	1			3.2.24	
	Warp .....			90	4						1.3.10	
All of <u>new</u> quality.												

Her Standing and Running Rigging is sufficient in size and good in quality.  
She has two life Long Boat and two others  
The present state of the Windlass is good Capstan good and Rudder good Pumps 4 deck, Main Engine &c.

Order for Special Survey DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Special  
No. 566 while building 2nd. On the plating during the progress of rivetting  
Date 20 March 1866 3rd. When the beams were in and fastened, and before the decks were laid  
Order for Ordinary Survey as per 4th. When the ship was complete, and before the plating was finally coated Survey  
No.      Section 18. 5th. After the ship was launched  
Date     

State if she has a Spar Deck raised quarter Poop deck 63 feet or Forecastle 35 feet

**General Remarks,**

*This vessel was built under survey of the late Mr. Tiltman, upon examining his note book, I find she is similar in every respect to the "Anglo Dane" report N<sup>o</sup> 10047 and Classed A 1.*

In what manner are the surfaces preserved from oxidation? Inside Cement and paint  
Ditto ditto Outside Paint

I am of opinion this Vessel should be Classed A 1  
The amount of the Fee .....£ 5 : : : is received by me,  
Nov 1866 Special .....£ 32 : 13 :  
Certificate (& required) .....£ : : :  
Committee's Minute 6<sup>th</sup> November 18 66

Character assigned A 1  
MG MA

*Form of opinion this Iron Steam Steamer is eligible for Classification as recommended above*  
Harding  
Lloyd's Register  
Nov 3/66

*James H. ... 2088, ...*