

See previous
Report No. 8609.

Compared with Table A for the *A class.
IRON SHIPS.

22/12/70

Rev 21/12/70

1870

No. 3580 Survey held at Wingham, Cranston Date 29th September
on the Screw Steam Ship "Scotland" Master Winkley
Tonnage under tonnage deck 1354.46 Built at Wingham When built 1868:1869 Launched 7th September
Ditto of poop 654.23 By whom built John (New) Owners John (New)
Ditto of fore-castle 84.83 Deck Houses 123.18
Ditto of engine room 800.24 Port belonging to Leith Destined Voyage Calcutta via Ceylon
Total Register tonnage 2145.45
Gross Tonnage 2145.45 Register Tonnage 1356.46
Surveyed while Building, Afloat, or in Dry Dock While Building

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
<u>298.0</u>		<u>32.71</u>		<u>24.4</u>		<u>500</u>		<u>Three</u>
(Dimensions of Ship per Register, length <u>302.6</u> breadth <u>34.9</u> depth <u>24.6</u>)								
Keel, if bar iron, depth and thickness	Inches in Ship.	Inches required per Rule.	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	at after end.	for 1200 tons scale.			Ditto from Garboard to upper part of Bilges..	<u>36</u>	<u>14</u>	<u>36</u>
Stem, if bar iron, moulding and thickness	<u>11x3</u>	<u>12x3</u>			" from upper part of Bilge to a perpendicular height from upper side of Keel of the engine depth of Hold	<u>13</u>	<u>✓</u>	<u>13</u>
" if plate iron, breadth and thickness	<u>5 1/2 x 2 1/2</u>	<u>9x3</u>			" from the depth of Hold to lower edge of Sheerstrake	<u>12</u>	<u>✓</u>	<u>12+11</u>
Stern-post, if bar iron, moulding and thickness	<u>10x4</u>	<u>9x6</u>			" from the depth of Hold to lower edge of Sheerstrake	<u>40</u>	<u>14</u>	<u>36</u>
" if plate iron, breadth and thickness					" from the depth of Hold to lower edge of Sheerstrake	<u>30</u>	<u>12</u>	<u>11</u>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<u>21</u>	<u>21</u>			Sheerstrake breadth and thickness	<u>3 1/2</u>	<u>9</u>	<u>10</u>
Frames, Size of Angle Iron, single or double	<u>5 1/2 3 1/2</u>	<u>10 5 3 1/2 9</u>			Butt Straps to outside plating, breadth and thickness	<u>1 1/2 1 1/2</u>	<u>15 14 16</u>	<u>4 4 4</u>
" Reversed Iron, if to every frame or every other frame	<u>4 3 1/2</u>	<u>9 3 1/2 3 8</u>			Gunwale Plate or Stringer on ends of Upper Main Deck Beams, breadth and thickness	<u>6x5 1/2</u>	<u>16</u>	<u>5 1/2 x 4 1/2 x 16</u>
Floors, depth and thickness of Floor Plate at mid line	<u>24</u>	<u>11 26 1/2</u>	<u>11</u>		Angle Iron on ditto	<u>6x5 1/2</u>	<u>9</u>	<u>6 1/2 x 5 1/2 x 10</u>
" Ditto ditto at Bilge Keelson		<u>11</u>	<u>11</u>		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	<u>14</u>	<u>11</u>	<u>13 1/2 11</u>
" Size of Reversed Angle Iron, and No. one at top of Floor Plate	<u>4 3 1/2</u>	<u>9 3 1/2 3 8</u>			Diagonal Tie Plates on Main Deck	<u>14</u>	<u>11</u>	<u>13 1/2 11</u>
Beams, Deck (No. 42) double Angle Iron, Plate, Tee, or Bulb Iron	<u>9</u>	<u>9 9 9 9</u>			Planksheer, materials and scantlings	<u>16</u>	<u>9</u>	
" double or single Angle Iron, on upper edge	<u>3 1/2 3 1/2</u>	<u>4 3 1/2 3 1/2 4 7</u>			Waterway	<u>16</u>	<u>9</u>	
" average space between	<u>42 ins</u>	<u>42 ins</u>			Flat of Upper Deck thickness and material	<u>4 1/2 Pine</u>	<u>4 1/2 ins</u>	
" Hold, or Lower Deck (No. 66) double Angle, Tee, Plate, or Bulb Iron	<u>9</u>	<u>9 9 9 9</u>			" how fastened to Beams	<u>Shrub Bolts & Nuts</u>		
" double or single Angle Iron, on upper edge	<u>3 1/2 3 1/2</u>	<u>4 3 1/2 3 1/2 4 7</u>			Ceiling betwixt Decks and in Hold, thickness and material	<u>3 1/2</u>	<u>11</u>	<u>3 1/2 12</u>
" average space between	<u>42 ins</u>	<u>42 ins</u>			Clamps or Spirketting	<u>12</u>	<u>9</u>	
" Planks, sided and moulded (No. 48) thickness of Plate size of Angle Iron	<u>3 1/2 3 1/2</u>	<u>4 3 1/2 3 1/2 4 7</u>			Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	<u>33</u>	<u>11</u>	<u>32 12</u>
" Keelson, single or double plate, box, or intercostal	<u>16</u>	<u>9 9 9 9</u>			Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	<u>14</u>	<u>11</u>	<u>13 1/2 11</u>
" Size of Plates	<u>12 1/2</u>	<u>8</u>			Stringers in Hold (Double Angle Iron)	<u>6 1/2 x 5 1/2</u>	<u>10</u>	<u>6 1/2 x 5 1/2 x 10</u>
" Size of Angle Irons	<u>6 5 1/2</u>	<u>9 6 1/2 5 1/2 10</u>			Flat of Lower Deck, thickness and material	<u>3 1/2 Pine</u>		
" Side, single or double, plate, box, or intercostal	<u>25</u>	<u>11</u>	<u>12</u>		Main piece of Rudder, diameter at head	<u>4 1/2</u>	<u>✓</u>	<u>4 1/2</u>
" Bilge (No. One) at each Bilge, single or double, plate, or box	<u>6 1/2 5 1/2</u>	<u>10 6 1/2 5 1/2 10</u>			" " " at heel	<u>3 1/2</u>	<u>✓</u>	<u>3 1/2</u>
Transoms, material <u>Iron</u> or, if none, in what manner compensated for.					(Can the Rudder be unshipped afloat <u>Yes</u>)			
Knight-heads, and Hawse Timbers <u>Iron</u>					Bulkheads, No. <u>5</u> Thickness of <u>5 1/2 7 1/2</u>			
The Frames extend in one length from <u>Keel</u> to <u>Gunwale</u>					" Height up <u>to Main Deck</u>			
The reverse angle irons on the floors extend in one length across the middle line from <u>Side</u> to <u>Main Deck</u>					" how secured to the sides of the ship <u>Double frames & broad lines</u>			
Keelson, how are the various lengths of plates or angle irons connected? <u>Butt Straps double riveted</u>					" size of vertical angle irons <u>5 1/2 x 3 1/2</u> and their distance apart <u>30 ins</u>			
Plates, Garboard, double <u>at fore end</u> rivetted to keel, double or at upper edge, with rivets (1 1/2 in.) diameter, averaging (5 1/4 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 ins.) apart.								
" Butts from Keel to turn of bilge, worked carvel with butt straps (5 1/4) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 ins.) 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.								
" Edges of Sheerstrake, double or single rivetted? At upper edge <u>Double rivetted</u> At lower edge <u>Double rivetted</u>								
" Butts from bilge to planksheers, worked carvel with butt straps (1 1/2) thick, double or single rivetted; with rivets (7/8 in.) diameter, averaging (3 1/2 ins.) apart. Breadth of laps in double rivetting (5 1/4) Breadth of laps in single rivetting ()								
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?								
Planksheer, how secured to the plating of the sides								
Waterway " planksheer and to the Beams								
Deck Beams, how secured to the side?								
Hold or Lower Deck ditto								
Paddle " "								
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?								
Manufacturer's name or trade mark <u>James L. & B. Walker</u>								
We certify that the above is a correct description of the several particulars therein given.								
Builder's Signature <u>John New</u>								
Surveyor's Signature <u>Edmund R. Cuthbertson</u>								

180447-0414

8609 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? Yes

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? Yes

Are there any rivets which either break into or have been put through the seams or butts of the plating? None

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.

Bowsprit and lower Masts of Iron. - Bowsprit in two strakes $\frac{7}{8}$ " thick, edges worked carvel with a lining piece $10 \times \frac{7}{8}$ " and double riveted. Butts treble riveted. Fore and Main Masts in four strakes of plating $\frac{3}{16}$ " thick, tapered to $\frac{1}{16}$ " at head, and $\frac{1}{16}$ " at heel, edges worked clinker and double riveted. Butts treble riveted, inside strakes doubled in way of wedging. - All other spars of Pitch Pine.

N ^o .	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight. Ex. Stock.	Test as per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
	Fore Sails,	Chain	300	1 $\frac{3}{8}$	63 $\frac{5}{8}$	1 $\frac{3}{8}$	5970	Bowers	1	34.0.10	31.1.0.0	32.	Tons 30 $\frac{10}{10}$
	Fore Top Sails,								1	34.0.4	31.1.0.0		
	Fore Topmast Stay Sails	Hempen Stream Cable	90	8		7		Stream	1	13.2.20		13.0.0	
	Main Sails,	Hawser	95	1 $\frac{3}{8}$		1 $\frac{3}{8}$		Kedges	1	6.3.2		6.2.0	
	Main Top Sails,	Towlines	90	9		11			1	3.1.10		3.1.0	
	and	Warp	90	4									
		All of <u>good</u> quality.	90	6									

Her Standing and Running Riggings Wire & Hempen sufficient in size and good in quality.

She has Two Long Boats and Two Life Boats

The present state of the Windlass is efficient Capstan efficient and Rudder efficient Pumps 3 Hand & 6 Steam.

Order for Special Survey. DATES of

see Secretary's letter Surveys held

Date 20th October 1868 while building

Order for Ordinary Survey as per

No. ✓ Section 18.

Date ✓

1st. On the several parts of the frame, when in place, and before the plating was wrought Special

2nd. On the plating during the progress of rivetting Surveyed while building

3rd. When the beams were in and fastened, and before the decks were laid from 24th June 1868

4th. When the ship was complete, and before the plating was finally coated to 29th September 1869

5th. After the ship was launched

State ✓ she has a Spar Deck

Pop Top Gallant Forecastle 64 feet long.

General Remarks,

Visits. - 24th June, 19th & 27th August, 26th October, 28th November, & 15th December 1868, & 4th January, 12th February, 20th March, 5th April, 14th May, & 9th August 1869, & 9th March, 9th & 15th & 23rd & 29th September 1870.

This Vessel was designed and constructed on the basis of the Old Rules with a view to class A with a Spar Deck. - Being fitted with a Forecastle on the Spar Deck 64 feet long, the scantlings of the Vessel were considerably increased from that required by the Rules, and in addition she is fitted with a Box Waterway on Spar Deck, and a Spinketting plate to the Lower Deck Beams, all in order to enable her to carry the addition of the Forecastle. - The Sheer of the Vessel is so arranged as to keep the Forecastle as low down as possible. - The Vessel is well and faithfully built, the workmanship being of the very best description. - I have to refer the Committee to a correspondence respecting the classification of this Vessel, when the scantlings and arrangements were submitted for approval, as contained in the Secretary's letters dated 15th May, 4th June & 20th October 1868. - I have to add that this Vessel was seen by the Visitation Committee on their recent visit to this District, and their attention specially drawn thereto. -

I herewith append letter received from the Builder & Owner, and respectfully leave the classification of the Vessel to the favorable consideration of the Committee. -

In what manner are the surfaces preserved from oxidation? Inside Painted in flat & painted above with three coats of Paint.

Ditto

ditto

Outside Five coats on Bottom, including One of Patent Composition & three coats of Paint above.

I am of opinion this Vessel should be Classed

The amount of the Fee £ 5 : 0 : 0 is not paid,

Special £ 46 : 8 : 6

Certificate (if required) £ 0 : 0 : 0

Committee's Minute 23rd Decr 1870

29th "

Character assigned 100 A 1

Travelling Expenses charged £ 4 : 10/- not paid.

Genl Commr in Min.

12 Janu 1871

1 asterisk "Spar Decked"



Lloyd's Register Foundation