

IRON SHIPS.

Re 23/11/65

No. 3249 Survey held at Kinghorn Date 22nd November
 on the Screw Steam Vessel Kinghorn Master R. Luckie
 Tonnage under tonnage deck 590.34 Built at Kinghorn When built 1865 Launched 21st October/65
 Ditto of poop 59.75 ^{houses on} ~~for open~~ deck 6.86 By whom built John New Owners Gibson & D. R. Macgregor
 Ditto of engine room 156.41 Port belonging to Lith Destined Voyage Rotterdam
 Total Register tonnage 513.28 ^{if surveyed while Building, Afloat, or in Dry Dock}
 Total Gross 669.99

Length aloft 212 ^{Feet.} 6 ^{Inches.} Extreme Breadth 27 ^{Feet.} 4 ^{Inches.} Depth from top of Upper Deck Beam to top of Floor 14 ^{Feet.} 11 ^{Inches.} Power of Engines 150 Horse. N^o. of Decks Two

Dimensions of Ship per Register, length 215.5 breadth 27.3 depth 14.9

	Inches in Ship		Inches required per Rule		Inches in Ship		Inches required per Rule	
	Inches	16ths	Inches	16ths	Inches	16ths	Inches	16ths
Keel, if bar iron, depth and thickness	4	22	4	22	4	22	4	22
„ if plate iron, breadth and thickness	4	22	4	22	4	22	4	22
Stem, if bar iron, moulding and thickness	4	22	4	22	4	22	4	22
„ if plate iron, breadth and thickness	4	22	4	22	4	22	4	22
Screw post, if bar iron, moulding and thickness	9 1/2	4 1/2	35	ine				
„ if plate iron, breadth and thickness	8 1/2	4						
Distance of Frames from moulding edge to moulding edge, all fore and aft	21		21					
Frames, Size of Angle Iron, single or double	3 1/2	3	4	3 1/2	3 1/2	3	4	3 1/2
„ „ Reversed Iron, to every frame or every frame	3	2 1/2	6	3	2 1/2	6	3	2 1/2
Floors, depth and thickness of Floor Plate at mid line	1 1/2	8	1 1/2	8	1 1/2	8	1 1/2	8
„ Ditto ditto at Bilge Keelson	9	8	9	8	9	8	9	8
„ Size of Reversed Angle Iron, and No. <u>one</u> at top of Floor Plate	3	2 1/2	6	3	2 1/2	6	3	2 1/2
Beams, Deck (N ^o . <u>52</u>) double Angle Iron, Plate, Tee, or Bulb Iron	6 1/2	4	6 1/2	4	6 1/2	4	6 1/2	4
„ „ double or single Angle Iron, on upper edge	2 3/4	2 3/4	5	2 3/4	2 3/4	5	2 3/4	5
„ „ average space between	42	ins	42	ins	42	ins	42	ins
„ Hold, or Lower Deck (N ^o . <u>22</u>) double Angle, Tee, Plate, or Bulb Iron	6 1/2	4	6 1/2	4	6 1/2	4	6 1/2	4
„ „ double or single Angle Iron on upper edge	2 3/4	2 3/4	5	2 3/4	2 3/4	5	2 3/4	5
„ „ average space between	84	ins	84	ins	84	ins	84	ins
„ Paddle, sided and moulded, thickness of Plate size of Angle Iron								
„ Engine								
Keelson, single or double plate, box, or intercostal	12	8	12	8	12	8	12	8
„ Foundation plate	13	8	13	8	13	8	13	8
„ Size of plates	11	8	11	8	11	8	11	8
„ Size of Angle Irons	4	4	8	4	4	8	4	4
„ Side, single or d'ble, plate, box, or intercostal	4	4	8	4	4	8	4	4
„ Bilge (No. <u>Two</u>) at each Bilge, single, or double, plate, or box	4 1/2	3	4	4 1/2	3	4	4 1/2	3
„ lower one with <u>Bulb</u> plate	6 1/2	4	6 1/2	4	6 1/2	4	6 1/2	4

	Inches in Ship	16ths in Ship	Inches required per Rule	16ths required per Rule
Plates in Garboard Strakes, breadth and thickness	30	11	30	11
Ditto from Garboard to upper part of Bilges	10		10	
„ from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold	9		9	
„ from 3/4ths depth of Hold to lower edge of Sheerstrake	8		8	
„ Sheerstrake, breadth and thickness	33	10	33	10
Butt Straps to outside plating, breadth and thickness	2 1/4	8	2 1/4	8
Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness	30	10	30	10
Angle Iron on ditto	4	4	4	4
Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways	10 1/2	10	10 1/2	8
Diagonal Tie Plates on ditto	10 1/2	10	10 1/2	8
Planksheer, materials and scantlings				
Waterway ditto ditto				
Flat of Upper Deck, thickness and material	3 1/2	6	3 1/2	6
„ how fastened to Beams				
Ceiling betwixt Decks and in Hold, thickness and material				
Clamps or Spirketting ditto	12	8	12	8
Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness	2 1/4	8	2 3/8	8
Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams	10 1/2	8	10 1/2	8
Stringers in Hold				
Flat of Lower Deck, thickness and material				
Main piece of Rudder, diameter at head	4 1/2		4 1/2	
„ „ „ at heel	2 3/4		2 3/4	
(Can the Rudder be unshipped afloat)				
Bulkheads, N ^o . <u>5</u> Thickness of	4 1/2		4 1/2	
„ Height up to Upper Deck				
„ how secured to the sides of the ship				
„ size of vertical angle irons 3x3x4 and their distance apart	30	ins	30	ins

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads, and Hawse Timbers Iron

The Frames extend in one length from Keel to Gunwale rivetted through plates with (3/4 in.) rivets, about (6 ins) apart.

The reverse angle irons on the floors extend in one length across the middle line from 5 feet across middle top of Spirketting plate & Gunwale alternately

„ „ „ on the frames „ „ „ from 5 feet across middle top of Spirketting plate & Gunwale alternately

Keelson, how are the various lengths of plates or angle irons connected? Butt straps double rivetted

Plates, Garboard, double rivetted to keel, double at upper edge, with rivets (1 1/4 ins.) diameter, averaging (4 or 3 in.) apart.

„ Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart.

„ Butts from Keel to turn of bilge, worked carvel with butt straps (10/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) 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 (3 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 3/4 Rivets At lower edge double 3/4 rivets

„ Butts from bilge to planksheers, worked carvel with butt straps (as plates) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart. Breadth of laps in double rivetting (4 1/4) Breadth of laps in single rivetting (2 3/4)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?

Planksheer, how secured to the plating of the sides { Explain by sketch } See Section

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

Deck Beams, how secured to the side? Welded Iron plates rivetted to Frames

Hold or Lower Deck ditto Do

Paddle „ „ No. of breasthooks Five crutches Five

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

Manufacturer's name or trade mark Plates Palmer's best farrow & Consett

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

Builder's Signature Whitney Surveyor's Signature E. M. M. M.

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Are the lands or laps of the clenchwork in cases in breadth at least five and a half times the thickness of the plates in dots and spaces? Yes
 Are the edges and butts, and at least three times the diameter of the rivets where single rivetting is used, and at least three and a quarter times the diameter of the rivets where double rivetting is used, the edges of the carvel work and of the butts lay close together throughout their length without requiring any shims or fillings between the ribs and plates fill in solid with single pieces? Yes
 Are 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? No.

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, made of rivetting, quality of Materials, and if stamped with Maker's name. Made of Wood)

She has SAILS.		CABLES, &c.			ANCHORS, and their weights.			
No.		Fathoms.	Inches.	Tested to Tons.	No.	Weight.	Tested to Tons.	
2	Fore Sails,	Chain <u>Staffordshire plate</u> <u>Seet</u>	270	1 3/8	3 1/2	1	16.3.19	18.2
2	Fore Top Sails,	Hempen Stream Cable	90	6		1	16.3.10	18.2
2	Fore Topmast Stay Sails,	Hawser	60	7/8	13.15	1	16.2.11	16.3
1	Main Sails,	Towlines	90	7/2		1	4.0.16	8.5
1	Main Top Sails,	Warp	70	5		1	3.2.12	5.7
and <u>others as usual</u>		All of <u>good</u> quality.	40	4		1	1.3.16	3.10

Her Standing and Running Rigging Mixed sufficient in size and good in quality.
 She has One Long Boat and four others
 The present state of the Windlass is efficient Capstan and Rudder and Pumps efficient

Order for Special Survey No. 130 Date 28 March 1865 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
 2nd. On the plating during the progress of rivetting
 3rd. When the beams were in and fastened, and before the decks were laid
 4th. When the ship was complete, and before the plating was finally coated
 5th. After the ship was launched
Specially Surveyed from 6th April 1865 to 22nd November 1865
 State if she has a Spar Deck, No. Full Poop 45 feet or Forecastle 40 ft

General Remarks,

*This is a carefully built vessel; the Butts of the Plating are well fitted by hand, there being at present no planing Machine; she was seen by Mr. Weymouth on his recent visit to this District in September last who commended the work in progress.
 She has been fitted with Diagonal plates on the Beams of the upper and lower deck and is built in all other respects in accordance with the Rules as set forth in the Secretary's letter dated the 20th February 1865.*

In what manner are the surfaces preserved from oxidation? Inside Two Coats of Red Lead
 Ditto ditto Outside Three Coats of Red Lead & Two of other Colour

I am of opinion this Vessel should be Classed A. 1.
 The amount of the Fee £ 5 : 0 : 0 is received by me,
 Certificate (if required) £ 33 : 10 : 0

E. Mountbatten

Committee's Minute 28th November 1865
1 December 1865

Signed A. 1.
A. C. P.
M. W.

