

# IRON SHIPS.

Rev 10/4/65

1865

No. 8368 Survey held at Tundelland Date April 5th  
on the Steam Trawler "Achilles" Master Robinson

Tonnage under tonnage deck 899.09 Built at Tundelland When built 1884-5 Launched Feb 25th 1885  
Ditto of poop on spar deck 86-14 By whom built James Laing Owners Mr. Gourley & Co.  
Ditto of engine room 204.35 Port belonging to Tundelland Destined Voyage Mediterranean  
Total Register tonnage 985.23  
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	
235.0	0		32.0	0		18.5	0		140		One	
(Dimensions of Ship per Register, length 235.0 breadth 32.0 depth 18.5)												
Keel, if bar iron, depth and thickness	Inches in Ship.		Inches required per Rule.		Plates in Garboard Strakes, breadth and thickness		Inches in Ship.		Inches required per Rule.		10ths required per Rule.	
7 1/2 x 3	7 1/2 x 3		7 1/2 x 3		30		11/16		30		11	
Stem, if bar iron, moulding and thickness	7 1/2 x 3		7 1/2 x 3		Ditto from Garboard to upper part of Bilges		-		10/16		10	
10 1/2 x 4 1/2	10 1/2 x 4 1/2		10 1/2 x 4 1/2		" from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold		-		9/16		9	
Distance of Frames from moulding edge to moulding edge, all fore and aft	23		23		" from 3/4ths depth of Hold to lower edge of Sheerstrake		-		8/16		8	
Frames, Size of Angle Iron, single or double	4 1/2 x 3		4 1/2 x 3		" Sheerstrake, breadth and thickness		30		12/16		12	
Reversed Iron, 3 to every frame	3		3		Butt Straps to outside plating, breadth and thickness		8 1/2		8 1/16		8 1/16	
Floors, depth and thickness of Floor Plate at mid line	20		20		Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness		33 1/2		11/16		33 1/2	
" Ditto ditto at Bilge Keelson	8		8		Angle Iron on ditto		5 x 4 1/2		9/16		5 x 4 1/2	
" Size of Reversed Angle Iron, and No. at top of Floor Plate	3		3		Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways		12		9/16		12	
Beams, Deck (No. 1) double Angle Iron, Plate, Tee, or Bulb Iron	8		8		Diagonal Tie Plates on ditto		12		9/16		12	
" double or single Angle Iron, on upper edge	3		3		Planksheer, materials and scantlings		-		-		-	
" average space between	3-10		3-10		Waterway ditto ditto		-		-		-	
" Hold, or Lower Deck (No. 1) double Angle, Tee, Plate, or Bulb Iron	8		8		Flat of Upper Deck, thickness and material		3 1/2		3 1/2		3 1/2	
" double or single Angle Iron, on upper edge	3		3		" how fastened to Beams		-		-		-	
" average space between	3-10		3-10		Ceiling betwixt Decks and in Hold, thickness and material		2 1/2		2 1/2		2 1/2	
" Paddle, sided and moulded, thickness of Plate size of Angle Iron	-		-		Clamps or Spirketting ditto		-		-		-	
Keelson, single or double plate, box, or intercostal	13 1/4		13 1/4		Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness		25		9/16		25	
" Size of Plates	5		5		Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams		12		9/16		12	
" Size of Angle Irons	4 1/2		4 1/2		Stringers in Hold		5 x 4 1/2		9/16		5 x 4 1/2	
" Side, single or double, plate, box, or intercostal	5		5		Flat of Lower Deck, thickness and material		-		-		-	
" Bilge (No. 1) at each Bilge, single, or double, plate, or box	5		5		Main piece of Rudder, diameter at head		5 1/2		5 1/2		5 1/2	
Transoms, material or, if none, in what manner compensated for	-		-		" " at heel		3		3		3	
Knight-heads, and Hawse Timbers	-		-		(Can the Rudder be unshipped afloat)		Yes		-		-	
The Frames extend in one length from Keel to gunwale	-		-		Bulkheads, No. 4 Thickness of		6 1/16		-		-	
The reverse angle irons on the floors extend in one length across the middle line from Hold beams	-		-		" Height up to upper deck		-		-		-	
" " on the frames " and " from Keelson to gunwale on alternate frames	-		-		" how secured to the sides of the ship		Belts, double frames		-		-	
Keelson, how are the various lengths of plates or angle irons connected?	-		-		" size of vertical angle irons		3 x 3 1/2		and their distance apart		30	
Plates, Garboard, double or rivetted to keel, double or and at upper edge, with rivets (1/4 ins.) diameter, averaging (3 1/2 ins.) apart.	-		-		rivetted through plates with (3/4 in.) rivets, about (6 in.) apart.		-		-		-	
" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.	-		-		The reverse angle irons on the floors extend in one length across the middle line from Hold beams		-		-		-	
" Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.	-		-		" " on the frames " and " from Keelson to gunwale on alternate frames		-		-		-	
" Edges from bilge to sheerstrake, worked carvel with a lining piece (1/4) thick, or clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart.	-		-		Keelson, how are the various lengths of plates or angle irons connected?		-		-		-	
" Edges of Sheerstrake, double or single rivetted? At upper edge Single & angle iron At lower edge Double	-		-		Plates, Garboard, double or rivetted to keel, double or and at upper edge, with rivets (1/4 ins.) diameter, averaging (3 1/2 ins.) apart.		-		-		-	
" Butts from bilge to planksheers, worked carvel with butt straps (8/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart. Breadth of laps in double rivetting (4 1/4) Breadth of laps in single rivetting (2 3/4)	-		-		" Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.		-		-		-	
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?	-		-		" Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart.		-		-		-	
Planksheer, how secured to the plating of the sides	-		-		" Edges from bilge to sheerstrake, worked carvel with a lining piece (1/4) thick, or clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 in.) apart.		-		-		-	
Waterway " planksheer and to the Beams	-		-		" Edges of Sheerstrake, double or single rivetted? At upper edge Single & angle iron At lower edge Double		-		-		-	
Deck Beams, how secured to the side?	-		-		" Butts from bilge to planksheers, worked carvel with butt straps (8/16) thick, double or single rivetted; with rivets (3/4 in.) diameter, averaging (2 1/2 ins.) apart. Breadth of laps in double rivetting (4 1/4) Breadth of laps in single rivetting (2 3/4)		-		-		-	
Hold or Lower Deck ditto	-		-		Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted?		-		-		-	
Paddle " "	-		-		Planksheer, how secured to the plating of the sides		-		-		-	
No. of breasthooks	Five		crutches		Waterway " planksheer and to the Beams		-		-		-	
What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?	-		-		Deck Beams, how secured to the side?		-		-		-	
Manufacturer's name or trade mark	Hopkins & Co. Ltd. Newcastle		-		Hold or Lower Deck ditto		-		-		-	
We certify that the above is a correct description of the several particulars therein given.	-		-		Paddle " "		-		-		-	
Builder's Signature	James Laing		-		No. of breasthooks		Five		crutches		Four	
Surveyor's Signature	-		-		What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.?		-		-		-	

IRON438-0192



**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? 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? A 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.)

4036 Ln

She has SAILS.		CABLES, &c.			ANCHORS, and their weights.			
N <sup>o</sup> .		Chain	Fathoms.	Inches.	Tested to Tons.	N <sup>o</sup> .	Weight.	Tested to Tons.
<u>The</u>	Fore Sails,	<u>Tested to 40 1/2</u>	<u>270</u>	<u>1 5/8</u>	<u>40 1/2</u>	Bowers,	<u>1</u>	<u>21.0.0</u>
<u>full</u>	Fore Top Sails,	Hempen Stream Cable	<u>80</u>	<u>9</u>			<u>1</u>	<u>21.0.0</u>
<u>not</u>	Fore Topmast Stay Sails,	Hawser <u>Chain</u>	<u>90</u>	<u>1 1/8</u>			<u>1</u>	<u>18.1.2</u>
	Main Sails,	Towlines	<u>90</u>	<u>7 1/8</u>		Stream,	<u>1</u>	<u>9.1.4</u>
	Main Top Sails,	Warp	<u>90</u>	<u>5</u>		Kedges,	<u>1</u>	<u>4.1.18</u>
and		All of <u>good</u> quality.	<u>90</u>				<u>1</u>	<u>2.1.12</u>

Her Standing and Running Rigging off Main Mast sufficient in size and good in quality.  
She has Two Life Long Boats and Three others  
The present state of the Windlass is Good Capstan Match and Rudder Good Pumps 2 of fine Good

Order for Special Survey No. 1612 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) Built and special survey from June 2/60 to the present date  
Date September 28/60 2nd. On the plating during the progress of rivetting  
Order for Ordinary Survey No.        as per 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  
5th. After the ship was launched

State if she has a Spar Deck No Poop Yes or Forecastle Yes

**General Remarks,**

The testing certificate of the Chain cables and Anchors signed by Mr John Thompson, have been produced.

This vessel is above 12, and not exceeding 13 decks in length. The main sheerstrake is increased <sup>in thickness</sup> two sixteenths of an inch amidships, for 3/4 the length of the vessel. The stringer plate upon ends of upper deck beams is increased two sixteenths of an inch in thickness for half the ship's length amidships, and in lieu of a bulk plate between bilge keelson completion, an extra keelson is fitted of double angle iron 5 x 4 1/2 x 3/8 as shown in the accompanying sketch.

In what manner are the surfaces preserved from oxidation? Inside Portland Cement & Sulphur, & paint  
Ditto ditto Outside Three coats of paint

I am of opinion this Vessel should be Classed A 1  
The amount of the Fee £ 5 : : : is received by me,  
Special £ 49 : 5 : :  
Certificate (if required) £ : : : :

Committee's Minute 11<sup>th</sup> April 18 65

Character assigned B 1

By Marshall  
This Iron Steamer built at London appears eligible for Classification as recommended above

10/4/65



Lloyd's Register Foundation