

# IRON SHIP.

No. 4502 Survey held at Dundee  
On the S.S. "Cuxhaven"

Date, First Survey 14<sup>th</sup> Oct<sup>r</sup> 1881 Last Survey 6<sup>th</sup> June 1882.

TONNAGE under 682.97 ONE, ~~OR TWO DECKED, THREE DECKED VESSEL,~~  
~~SPAR, OR AWNING DECKED VESSEL.~~  
Half Breadth (moulded) 15.83  
Depth from upper part of Keel to top of Upper Deck Beams 15.12  
Girth of Half Midship Frame (as per Rule) 27.87  
1st Number 58.82  
~~1st Number, if a 3 Decked Vessel deduct 7 feet~~  
Length 128.71  
2nd Number 210.83  
Proportions— Breadths to Length 6.9  
Depths to Length—Upper Deck to Keel 14.4  
Main Deck ditto

Master Ayre  
Built at Dundee  
When built 1882 Launched 6<sup>th</sup> May  
By whom built W. B. Thompson  
Owners Yorkshire Coal & Steamship Co. (Lim.)  
Residence Goole  
Port belonging to Goole  
Destined Voyage Hamburg  
Surveyed while Building, Afloat, or in Dry Dock

Dimensions of Ship per Register, length, 220.0 breadth, 32.0 depth, 3.7  
Feet. Inches. BREADTH— Moulded... 31 8  
Feet. Inches. DEPTH top of Floors to Upper Deck Beams... 13 8 1/2  
Power of Engines... 150  
Horse. No. of Decks with flat laid One  
No. of Tiers of Beams One

TEEL, depth and thickness 8 x 2 3/8  
TEEL, moulding and thickness 7 x 2 3/8  
TERN-POST for Rudder do. do. 7 x 4 3/4  
Distance of Frames from moulding edge to moulding edge, all fore and aft 22  
FRAMES, Angle Iron, for 3/4 length amidships 3 1/2 3 4 3 1/2 3 4  
Do. for 1/4 at each end 6 6  
REVERSED FRAMES, Angle Iron 3 2 1/2 6 3 2 1/2 6  
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 17 8 1/4  
thickness at the ends of vessel 6  
depth at 3/4 the half-bdth. as per Rule 9 1/2  
height extended at the Bilges twice midship height  
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron 3 3 6 3 3 6  
Average space 16 inches  
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron  
Average space 16 inches  
BEAMS, Lower Deck Single or double Angle Iron, Plate or Tee Bulb Iron  
Average space 16 inches  
BEAMS, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron  
Average space 16 inches  
KEELSONS Centre line, single or double plate, 13 10  
Rider Plate 9 7/8 10  
Bulk Plates to Intercoastal Keelson 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
Double Angle Iron Side Keelson 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
Side Intercoastal Plate 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
do. Angle Irons 3 2 1/2 6 3 2 1/2 6  
Attached to outside plating with angle iron 3 2 1/2 6 3 2 1/2 6  
BILGE Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
do. Bulb Iron 7 1/2 7 7 1/2 7  
do. Intercoastal plates riveted to plating for 1/2 length 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
BILGE STRINGER Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
Intercoastal plates riveted to plating for 1/2 length 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
SIDE STRINGER Angle Irons 4 1/2 3 1/2 7 4 1/2 3 1/2 7  
FRAMES extend in one length from Keel to gunwale  
REVERSED ANGLE IRONS on floors and frames extend from middle line to side stringer and to gunwale alternately  
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes  
PLATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 1/2 ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 ins. from centre to centre.  
Butts of 2 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/2 thicker than the plates they connect.  
Edges from Bilge to Main Sheerstrake, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 3 ins. from cr. to cr.  
Edges of Main Sheerstrake, double or single riveted.  
Butts of Main Sheerstrake, treble riveted for 1/2 length amidships.  
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships.  
Breadth of laps of plating in double riveting 5 1/2 x 4 1/2 Breadth of laps of plating in single riveting 5 1/2 x 4 1/2  
Butt Straps of Keelsons, Stringer and Tie Plates, treble or double Riveted  
No. of Breasthooks, 4 Crutches, 4  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Ordinary ship iron  
Manufacturer's name or trade mark, Ayres Dorman Long & Co. Plate M. Stockton Iron Co.  
The above is a correct description.  
Builder's Signature, W. B. Thompson Surveyor's Signature, Geo. T. Cooper  
Surveyor to Lloyd's Register of Shipping.

\* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

Workmanship. Are the butts of plating planed or otherwise fitted? *planed*  
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*  
Are the fillings between the ribs and plates solid single pieces? *yes*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *yes*  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *yes*  
Do any rivets break into or through the seams or butts of the plating? *few*

Masts, Bowsprit, Yards, &c., are *wood* in *good* condition, and sufficient in size and length. If of Iron or Steel give scantlings  
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 riveting, quality of Material  
and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Schooner rigged*  
*Fore Mast } Height above deck 50 1/2 ft Max dia 18 in*  
*Main - }*

NUMBER for EQUIPMENT 14158		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.
SAILES.												
CABLES, &c.												
N <sup>o</sup> .	Chain	240	1 7/16	378	240-1 1/2		Bower Anchors	10359	18-2-2	19-13-0-14	18-0-0	
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)							14-4-82				
Fore Sails,	No 4389	20 1/4	1/82					10360	18-0-14	19-2-0-2	18-0-0	
Fore Top Sails,	Iron Stream Chain	60	1 5/16	15 9/10	60-1 5/8			9986	16-1-0	17-11-3-14	15-1-0	
Fore Topmast Stay Sails,	or Steel Wire	No 4391	20 1/4	1/82				12-12-81				
Fore Topmast Stay Sails,	or Hempen Strm Cable	90	3 1/2				Total weight		53-0-7		51-1-0	
Main Sails,	Towline, <del>Steel Wire</del>						Stream Anchor	10367	7-0-2	9-9-1-14	6-2-0	
Main Top Sails,	Hawser	90	9 1/2		90-9 1/2		Kedge	10366	3-0-0	5-10-0-0	3-1-0	
and	Warp	90	7 1/2		90-7 1/2		2nd Kedge	10365	1-3-0	4-4-1-14	1-2-0	
	quality <i>good</i>	170	7 1/2	others	90-5 1/2							

Standing and Running Rigging *wire & rope* sufficient in size and *good* in quality. She has *Four* ~~Long~~ Boats

The Windlass is *Bureau & Walker* Capstan *good* and Rudder *good* Pumps *5 in* in *each* *comp.*

Engine Room Skylights.—How constructed? *Teak skylight & canvas* How secured in ordinary weather? *bolted*

What arrangements for deadlights in bad weather? *solid shutter & bulls-eyes*

Coal Bunker Openings.—How constructed? *Cool iron rim & cover* How are lids secured? *Clips* Height above deck? *flush*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Flap ports & scuppers*

Cargo Hatchways.—How formed? *Plates & angle iron in usual manner* 28 in above deck & 7/16 thick

State size Main Hatch *21.9 x 10.6* Forehatch *11.0 x 9.0* Quarterhatch *18.3 x 10.6*

If of extraordinary size, state how framed and secured? *not extraordinary size*

What arrangement for shifting beams? *Strong web plate with wood fore & after*

Hatches, If strong and efficient? *yes*

Order for Special Survey No. *411* DATES of Surveys held while building as per Section 18.

Date *24<sup>th</sup> Oct 1881* 1st. On the several parts of the frame, when in place, and before the plating was wrought

Order for Ordinary Survey No. *40* 2nd. On the plating during the process of riveting

Date *✓* 3rd. When the beams were in and fastened, and before the decks were laid...

No. *40* in builder's yard. 4th. When the ship was complete, and before the plating was finally coated or cemented..

5th. After the ship was launched and equipped

General Remarks (State quality of workmanship, &c.) *This is a one decked vessel built in accordance with the plans submitted to & approved by the Committee - London Letter No 14 Oct 1881*  
*She is fitted with double bottom in the fore hold the after hold & under the engines*  
*Centre girder of which is 9/16 & the three girders on each side thereof 5/16 wing plate 7/16 thick*  
*Angle iron 3 x 2 1/2 x 5/16 & top plating 5/16. This double bottom has been tested under pressure*  
*as required by the Rules & is satisfactory*  
*A bilge keel is fitted amidships on each side framed of built iron 7 x 7/16 between two*  
*angle iron 3 1/2 x 3 1/2 x 7/16*  
*The vessel has poop 40 ft long bridge deck 72 ft long & top gallant forecastle 32 ft long*  
*Forecastle beam of built 6 1/2 x 5/16 with double 2 1/2 x 2 1/2 x 5/16 angles } Plating 5/16 & 5/16 stringers 27 x 5/16*  
*Poop & bridge beam of angle iron 5 1/2 x 3 x 7/16 } Deck 2 3/4 thick*  
*The material & workmanship are alike satisfactory*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form)

How are the surfaces preserved from oxidation? Inside *Paint & cement* Outside *Paint*

I am of opinion this Vessel should be Classed *- 100 A 1*

The amount of the Entry Fee... £ *5 : 0 : 0* is received by me, *app*

*703 tons* Special ... £ *39 : 3 : 0* 2-6-1882

Certificate ... (to be sent as per margin).

(Travelling Expenses, if any, £ ...).

Committee's Minute *Friday, 11<sup>th</sup> June, 1882.*

Character assigned *TRIP 100 A 1*

*Geo. N. Cooper*  
Surveyor to Lloyd's Register of British and Foreign Shipping  
Lloyd's Register  
Foundation