

Steel IRON SHIP.

(Received at London Office)

No. 4710 Survey held at Dundee
On the S.S. "Dresden"

Date, First Survey 6th Decr 1883 Last Survey 11th July 1884

Official Number 67845

Tonnage under Tonnage Deck	729.43
Ditto of Third Spar, of Awning Deck	38.12
Ditto of Poop, of Awning Deck	29.33
Ditto of Houses on Deck	11.05
Ditto of Forecastle	25.63
Gross Tonnage	844.94
Less Crew Space	47.34
Less Engine Room	797.60
Register Tonnage as cut on Beam	325.75
	471.85

ONE, OR TWO DECKED, THREE DECKED VESSEL, SPAR, OR AWNING-DECKED VESSEL.	
Half Breadth (moulded)	15.92
Depth from upper part of Keel to top of Upper Deck Beams	15.25
Girth of Half Midship Frame (as per Rule)	27.76
1st Number	58.93
2nd Number	13483
Length	228.8
Proportions— Breadths to Length	7.2
Depths to Length— Upper Deck to Keel	15
Main Deck ditto	

Master Ayre
 Built at Dundee
 When built 1884 Launched 5th June
 By whom built W. B. Thompson
 Owners Yorkshire Coal & Steam Ship Co
 Residence Goole
 Port belonging to Goole
 Destined Voyage Goole to Hamburg
 If Surveyed while Building, Afloat, or in Dry Dock. Surveyed while building

LENGTH on deck as per Rule	BREADTH— Moulded	DEPTH top of Floors to Upper Deck Beams	Power of Engines	Horse	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
228 10	31 10	13 10	150	150	one	one
Dimensions of Ship per Register, length, <u>230</u> breadth, <u>32</u> depth, <u>13.65</u>						
KEEL, depth and thickness <u>Iron 8 x 2 3/8</u>						
STEM, moulding and thickness <u>7 1/2 x 2 3/8</u>						
STERN-POST for Rudder do. do. <u>7 1/2 x 4 3/4</u>						
Distance of Frames from moulding edge to moulding edge, all fore and aft <u>23 in</u>						
FRAMES, Angle Iron, for 1/2 length amidships <u>3 1/2 3 12</u>						
Do. for 1/3 at each end <u>3 2 10</u>						
REVERSED FRAMES, Angle Iron <u>3 2 10</u>						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships <u>17 14 x 1/2</u>						
thickness at the ends of vessel <u>10</u>						
depth at 3/4 the half-bdth. as per Rule <u>9</u>						
height extended at the Bilges <u>twice midship height</u>						
BEAMS, Upper, Span on Awning Deck <u>7 1/2 12</u>						
Single or double Angle Iron on Upper edge <u>3 3 10</u>						
Average space <u>alternate frames</u>						
BEAMS, Main, or Middle Deck <u>7 1/2 12</u>						
Single or double Angle Iron on Upper Edge <u>3 3 10</u>						
Average space <u>alternate frames</u>						
BEAMS, Lower Deck <u>7 1/2 12</u>						
Single or double Angle Iron on Upper Edge <u>3 3 10</u>						
Average space <u>alternate frames</u>						
BEAMS, Hold, or Orlop <u>7 1/2 12</u>						
Single or double Angle Iron on Upper Edge <u>3 3 10</u>						
Average space <u>alternate frames</u>						
KEELSONS Centre line, single or double plate, <u>14 18</u>						
Rider Plate <u>10 1/4 18</u>						
Bolt Plate to Intercoastal Keelson <u>5 3 1/2 12</u>						
Angle Iron <u>5 3 1/2 12</u>						
Double Angle Iron Side Keelson <u>5 3 1/2 12</u>						
Side Intercoastal Plate <u>5 3 1/2 12</u>						
do. Angle Iron <u>5 3 1/2 12</u>						
Attached to outside plating with angle iron <u>5 3 1/2 12</u>						
BILGE Angle Iron <u>5 3 1/2 12</u>						
do. Bulb Iron <u>7 1/2 12</u>						
do. Intercoastal plates riveted to plating for 1/2 length <u>5 3 1/2 12</u>						
BILGE STRINGER Angle Iron <u>5 3 1/2 12</u>						
Intercoastal plates riveted to plating for 1/2 length <u>5 3 1/2 12</u>						
SIDE STRINGER Angle Iron <u>5 3 1/2 12</u>						

The FRAMES extend in one length from Keel to gunwale

The REVERSED ANGLE IRONS on floors and frames extend from middle line to hold 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 in diameter, averaging 5 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 3 Strakes at Bilge for 2 length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double single riveted; with rivets 3/4 in diameter, averaging 3 1/2 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 single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships

Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length amidships

Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 4 1/2

Butt Straps of Keelsons, Stringer and Tie Plates, treble 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.? Same as Keel

Manufacturer's name or trade mark, Frames - Messend

The above is a correct description. Plates of Connell

Builder's Signature, Pro. W. B. Thompson Surveyor's Signature, Geo. J. Cooper

Surveyor to Lloyd's Register of British and Foreign Shipping, Geo. J. Cooper

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? *no*

Masts, Bowsprit, Yards, &c., are of *Iron* in *iron* condition, and sufficient in size and length. If of Iron or Steel give Scanlings of Plating, Angle Irons, &c., and further explain how the Lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.
 State also Length and Diameter of Lower Masts and Bowsprit *Schooner rigged*

*Foremast 65 ft 3 in - diam 2 1/2 in } Two plates in wood 5/16 to 3/4 - double riveted
 Main . 62 ft . 2 1/2 in } beam - butte straps - double at deck*

Reference should be made to any correspondence connected with the case.

No.	SAILS.	CABLES, &c.	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.	
	Fore Sails,	Chain	240	17/16	37-125	240-17/16	Bower Anchors	1125	18-1-16	19-6-2-7	18-0-0
	Fore Top Sails,	Iron Stream Chain	60	15/16	15.8	60-15/16		1127	17-0-19	18-7-3-4	18-0-0
	Fore Topmast Stay Sails,	or Steel Wire ..	60					1126	16-1-3	17-11-3-14	15-1-0
		or Hempen Strm } Cable	90	3/4	26	90-3/4	Total		51-3-10		51-1-0
	Main Sails,	Towline, Hemp.	90	2	7			1132	6-2-19	8-18-3-0	6-2-0
	Main Top Sails,	or Steel Wire ..	140	7/8	manilla	90-7/8	Stream Anchor	1131	3-2-5	5-18-3-0	3-1-0
	and	Hawser	180	5/8		90-5/8	Kedge ...		1-2-27		1-2-0
		Warp	360	4/8			2nd Kedge ...				

Standing and Running Rigging *wire & rope* sufficient in size and *iron* in quality. She has *Two* Life Boats and *two* others.
 The Windlass is *Patent* Capstan *iron* and Rudder *iron* Pumps *5 in diam.*

Engine Room Skylights.—How constructed? *Iron skylight on iron* How secured in ordinary weather? *bolts*

What arrangements for deadlights in bad weather? *Craning 24 in above bridge etc. fitted with solid shutters & bullseyes*

Coal Bunker Openings.—How constructed? *Cast iron iron & com* How are lids secured? *bolting cranked* Height above deck? *flush under*

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

Cargo Hatchways.—How formed? *Iron cranning, full depth 28 in above deck*

State size Main Hatch *28.9 x 10.6* Forehatch *11.6 x 10.6* Quarterhatch *28.9 x 10.6*

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

What arrangement for shifting beams? *Two deep web plates in after hatchway & one in main hatchway -*

Hatches, If strong and efficient? *2 3/4 in solid*

Order for Special Survey No. *453* Date *28th Nov 1883*
 Order for Ordinary Survey No. *59* Date *28th July 1884*
 No. *59* in builder's yard.
 State dates of letters respecting this case.

General Remarks (State quality of accordance with the rules)
 REPORT, No. *4740* FROM *Dundee* DATE *5/8/84*
 ON THE *Dresden*
 REMARKS OF THE CHIEF SURVEYOR.

This vessel has been built in accordance with the approved plans appended, and appears to be worthy to be classed 100 A 1 Steel as recommended (part Steel). Double Bottom particulars appended.

The material, stamped B & uniced as having been tested by the Society's Surveyors, has proved very satisfactory. The workmanship is very good.

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

I am of opinion this Vessel should be Classed *+ 100 A 1*
 The amount of the Entry Fee £ 3 : 0 : 0 is received by me,
 Special £ 42 : 5 : 0 *28th July 1884*

(to be sent as per margin). Certificate ...
 (Travelling Expenses, if any, £ ...)
 Committee's Minute *TUESDAY 5 AUGUST 1884 18*

Character assigned *100 A 1 Steel*
Surveyor to Board's Register of British and Foreign Shipping
Lloyd's Register Foundation

No. ...
 Reg. B ...
 Master ...
 Engines ...
 Boilers ...
 Register ...
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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? *no*

Masts, Bowsprit, Yards, &c., are *of iron* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scanlings 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 riveting, quality of Materials, and if stamped with Maker's name.
 State also Length and Diameter of Lower Masts and Bowsprit *Schooner rigged*

Foremast 65 ft 3 in. diam 21 in. Two plates in round 5/16 to 1/4 - double riveted
Main 62 ft - 21 - 5 seams - butte straps - doubled at deck

NUMBER for EQUIPMENT 14831 (M)		Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate	Wght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.		CABLES, &c.				Bower Anchors	1125	18-1-16	19-6-2-7	18-0-0	
N ^o .	Chain	240	17/16	37-125	240-176	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1127	17-0-19	18-7-3-4	18-0-0	
Fore Sails,	Iron Stream Chain	60	15/16	15.8	60-1576	Total	1126	16-1-3	17-11-3-14	15-1-0	
Fore Top Sails,	or Steel Wire ..	60	15/16	15.8	60-1576						
Fore Topmast Stay Sails,	or Hempen Strm } Cable	90	3/4	26	90-38						
Main Sails,	Towline, Hemp. or Steel Wire ..	90	2	7	90-72	Stream Anchor	1132	6-2-19	8-18-3-0	6-2-0	
Main Top Sails, and	Hawser	180	3/2	7	90-52	Kedge	1131	3-2-5	5-18-3-0	3-1-0	
	Warp	360	4/2	7	90-52	2nd Kedge		1-2-27		1-2-0	
	quality <i>good</i>										

Standing and Running Rigging *wire & rope* sufficient in size and *good* in quality. She has *Two* Life Boats and *two* others.
 The Windlass is *Patent* Capstan *good* and Rudder *good* Pumps *5 in diam.*

Engine Room Skylights.—How constructed? *Iron skylight on rim* How secured in ordinary weather? *bolted*

What arrangements for deadlights in bad weather? *Crammings 24 in above bridge etc. fitted with solid shutters & ballast*

Coal Bunker Openings.—How constructed? *Cast iron rim 4 cm* How are lids secured? *locking cranked* Height above deck? *flush under*

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

Cargo Hatchways.—How formed? *Iron crammings full depth 28 in above deck*

State size Main Hatch *28.9 x 10.6* Forehatch *11.6 x 10.6* Quarterhatch *28.9 x 10.6*

If of extraordinary size, state how framed and secured? *but extraordinary size*

What arrangement for shifting beams? *Two deep web plates in after hatchway & one in main hatchway -*

Hatches, if strong and efficient? *2 3/4 in solid*

Order for Special Survey No. *453*
 Date *28th Nov 1883*
 1st. On the several parts of the frame, when in place, and before the plating was wrought } *1883 Dec 6. 18. 1884 Jan 10. 22. 29. Feb 8. 14. 26.*
 2nd. On the plating during the process of riveting } *Mar 3. 7. 13. 18. 26. 31. Apr 3. 10. 14. 19. 23. 25. 30. May 3. 7.*
 3rd. When the beams were in and fastened, and before the decks were laid... } *16. 16. 17. 20. 23. 26. 30. June 2. 5. 9. 12. 20. 25. July 1. 2. 4.*
 the ship was complete, and before the plating was finally coated or cemented.. } *7. 9. 11 -*
 the ship was launched and equipped. } *Nov: 9 M 18th Dec: 1883. P 9th May 1884.*

(ship, &c.) This is a one decked vessel built of steel in *formed plans-attached* & in other respects according

is fitted with part double bottom, constructed of *arrangements of which are as under by. Central ribs 1/6 - At widest part three girders 1/6 - angles 3 x 2 1/2 x 1/6 - Top plate 1/6 - Length & capacity in ship attached - of engine space the deck plating where cut away for as approved by Committee - see tracing attached. has a full poop 51 ft long the front being open & the rim after part of poop placed 16 ft from front - A bridge deck bulkheaded at fore end is fitted for 45 ft & a forecabin 25*

The material, stamped B & inscribed as having been tested by *The Society's Surveyor, has proved very satisfactory. The workmanship is very good*

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

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

The amount of the Entry Fee £ 3 : 0 : 0 is received by me, *QPC*
 Special £ 42 : 5 : 0 *28th July 1884*

(to be sent as per margin). Certificate ...
 (Traveling Expenses, if any, £ ...)

Committee's Minute *TUESDAY 5 AUGUST 1884 18*

Character assigned *100 A 1*
QPC
 Surveyor to Lloyd's Register of British and Foreign Shipping

No. 3
 No. in
 Reg. Bo
 Master
 Engines
 Boilers
 Register
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