

STEEL IRON SHIP.

No. 57483 Survey held at Dumbarton Date, First Survey 6 Aug 1880 Last Survey 27 Aug 1880
On the S.S. "Clyde" 3 masts.
Tonnage under 2900 71
Tonnage Deck 1033 34
Tonnage Poop, or Raised Qr. Dk. 189 84
Tonnage Forecastle 4123 89
Tonnage Crew Space 168 95
Tonnage Engine Room 3954 94
Tonnage as cut on Beam 1513 02
Tonnage as cut on Beam 2441 92
Master E. M. Edmond
Built at Dumbarton
When built 1880/81 Launched 16 June 1881
By whom built Wm Denny & Bros.
Owners Peninsular & Oriental Steam Navigation Co.
Residence London
Port belonging to Glasgow
Destined Voyage
If Surveyed while Building, Afloat, or in Dry Dock. While Building & afloat.

LENGTH	Feet.	Inches.	BREADTH	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of Engines	No. of Decks with flat laid	No. of Tiers of Beams
on deck as per Rule	388	2	Moulded	42	0	top of Floors to Upper Deck Beams Do. do. Main Deck Beams	24	10	780	3	3
Dimensions of Ship per Register, length	390		breadth	42 1		depth	24 5				
KEEL, depth and thickness	11 x 3 1/2			11 x 3 1/2							
STEM, moulding and thickness	11 x 3 1/2			11 x 3 1/2							
STERN-POST for Rudder do. do.	11 x 6 1/2			11 x 6 1/2							
" " for Propeller	13 x 6 1/2			13 x 6 1/2							
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 ins			24 ins							
FRAMES, Angle Iron, for 1/2 length amidships	4 x 3 1/2			4 x 3 1/2							
Do. for 1/2 at each end	4 x 3 1/2			4 x 3 1/2							
REVERSED FRAMES, Angle Iron	4 x 3 1/2			4 x 3 1/2							
FLOORS, depth and thickness of Floor Plate	28			28							
at mid line for half length amidships	19			19							
thickness at the ends of vessel	15			15							
depth at 3/4 the half-bdth. as per Rule	14 ins			14 ins							
height extended at the Bilges	86 ins			86 ins							
BEAMS, Upper, Spar, or Afterside Deck	8			8							
Single or double Angle Iron, Plate or Tee Bulb	48 ins			48 ins							
Single or double Angle Iron on Upper edge	10			10							
Average space	48 ins			48 ins							
BEAMS, Main, or Middle Deck	10			10							
Single or double Angle Iron, Plate or Tee Bulb	50			50							
Single or double Angle Iron on Upper edge	48 ins			48 ins							
Average space	48 ins			48 ins							
BEAMS, Lower Deck	10			10							
Single or double Angle Iron, Plate or Tee Bulb	50			50							
Single or double Angle Iron on Upper edge	48 ins			48 ins							
Average space	48 ins			48 ins							
BEAMS, Hold, or Orlop	10			10							
Single or double Angle Iron, Plate or Tee Bulb	50			50							
Single or double Angle Iron on Upper edge	48 ins			48 ins							
Average space	48 ins			48 ins							
KEELSONS Centre line, single or double plate	26			26							
Box, or Intercoastal, Plates	14			14							
Rider Plate	18			18							
Bulk Plate to Intercoastal Keelson	2-6 1/2 x 4 1/2			2-6 1/2 x 4 1/2							
Angle Irons	6 1/2 x 4 1/2			6 1/2 x 4 1/2							
Double Angle Iron Side Keelson	6 1/2 x 4 1/2			6 1/2 x 4 1/2							
Side Intercoastal Plate	6 1/2 x 4 1/2			6 1/2 x 4 1/2							
do. Angle Irons	5 1/2 x 3 1/2			5 1/2 x 3 1/2							
Attached to outside plating with angle iron	5 1/2 x 3 1/2			5 1/2 x 3 1/2							
BILGE Angle Irons	6 1/2 x 4 1/2			6 1/2 x 4 1/2							
do. Bulk Iron, plate	13			13							
do. Intercoastal plates riveted to plating for 3/4 length	16			16							
BILGE STRINGER Angle Irons	3 1/2 x 3 1/2			3 1/2 x 3 1/2							
Intercoastal plates riveted to plating for the length of web frames	15			15							
SIDE STRINGER Angle Irons	3 1/2 x 3 1/2			3 1/2 x 3 1/2							

The FRAMES extend in one length from Bilge to Bilge & from Bilge to Spar deck Riveted through plates with 7/8 in. Rivets, about 7 apart.
The REVERSED ANGLE IRONS on floors and frames extend from middle line to main & spar decks and to alternately
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? No And butts properly shifted? Yes
PLATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 1/4 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/8 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.
Butts of Strakes at Bilge for whole length, treble riveted with Butt Straps 1/8 thicker than the plates they connect.
Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 1/2 to 3 1/2 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.
Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
Butts of Main Sheerstrake, treble riveted for whole length amidships. Butts of Spar Sheerstrake, treble riveted whole length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Spar Stringer Plate, treble riveted for whole length.
Breadth of laps of plating in double riveting 8 1/2 to 6 Breadth of laps of plating in single riveting
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Tre & Don No. of Breasthooks, 5 Crutches, 4
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Parkhead "Hallside"
Manufacturer's name or trade mark, Messrs J. & W. Beardmore, Steel Co. of Scotland ("Buttler") & West Cumberland
The above is a correct description.
Builder's Signature, Wm Denny & Bros. Surveyor's Signature, J. D. Smith
Surveyor to Lloyd's Register of British and Foreign Ships

State clearly where plating is of alternate thicknesses as distinguished from diminished thickness at ends of vessel.
* If Iron Deck, state if whole or part, and if wood deck is laid thereon.

GLS 146-0072

5483 8/8

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?

A few

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

State also Length and Diameter of Lower Masts and Bowsprit The masts and Yards are built in accordance with the Trawing attached herewith, which was approved by the Committee in the Secretary's letter of the 9th August 1880. The steel being tested at the manufacturer's works by one of the Society's Surveyors.

NUMBER for EQUIPMENT	SALES.	CABLES.	Fathoms.	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.
N ^o .													
Fore Sails,		Chain	150	2 1/8	8 1/4	300-2 1/8	hekat	Bower Anchors	1	42-1-18	37 1/2 tons	41 1/2	W. H. P. & Co.
Fore Top Sails,		Iron Stream Chain	150	2 1/8	11 3/4	90-13/16	signed	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	22-0-4	37-4-1-14	159 3/4	D. G.
Fore Topmast Stay Sails,		or Steel Wire	120	6	28-2-2-0	90-12	by	25-1-1	1	40-2-11	36-4-1-14	159 3/4	Lewis
Main Sails,		or Hempen Strm	120	6	28-2-2-0	90-12	by	25-1-1	1	39-0-0	35-1-2-0	159 3/4	Lewis
Main Top Sails,		Cable	240	2 1/2	11 3/4	90-12	D. G.	23 April 1881	1	15-3-19	17-5-1-7	1-12 3/4	Glasgow
and Spare		Towline, Hemp	120	8	28-2-2-0	90-8	Lewis	Stream Anchor	1	2-2-18	12-6-2-7	1-6 1/2	Cardiff
		or Steel Wire	120	8	28-2-2-0	90-8	Lewis	Kedge	1	1-2-8	10-5-0-0	1-3 1/2	Glasgow
		Hawser	120	7	28-2-2-0	90-8	Lewis	2nd Kedge	1	8-0-12	7-9-2-2	3	Glasgow
		Warp	120	6	28-2-2-0	90-8	Lewis			5-0-9	7-9-2-2	3	Glasgow

Standing and Running Rigging wire & hemp sufficient in size and g^d in quality. She has 2 Long Boat and 1 Steam Launch & 4 other Boats.

The Windlass is Patent Capstan good and Rudder good Pumps good

Engine Room Skylights. How constructed? Teak on Iron Coamings How secured in ordinary weather? Bolts.

What arrangements for deadlights in bad weather? Brass quadrants with Carpanthin

Coal Bunker Openings. How constructed? Iron by Deck How are lids secured? By Bars Height above deck? ✓

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? open Bulwarks

Cargo Hatchways. How formed? As usual

State size Main Hatches Fore 15' 6" x 11' 6" Fore hatch 3' 6" high 8' 6" x 8' 6" Quarter hatch 10' 6" x 7' 6"

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

What arrangement for shifting beams? one deep shifting plate in fore main hatch.

Hatches, if strong and efficient? Yes.

Order for Special Survey No. <u>518</u>	1st. On the several parts of the frame, when in place, and before the plating was wrought	Special Surveyed: - 1880: - Aug 6, 9, 12, 16, 19, 23; Sep 7, 13, 16, 20, 23, 27, 30; Oct 4, 8, 11, 14, 19, 22, 25; Nov 1, 4, 7, 10, 13, 16, 20, 23, 27, 30; Dec 2, 6, 9, 13, 16, 20, 27, 30; 1881: - Jan 10, 13, 17, 20, 24, 27; Feb 3, 6, 10, 14, 17, 21, 24; Mar 2, 7, 10, 14, 17, 21, 24; Apr 4, 8, 11, 14, 18, 21, 22, 23, 25, 28; May 3, 9, 12, 16, 20, 23, 27; June 2, 6, 9, 14, 16, 20, 23, 27; July 5, 9, 15, 20, 25; Aug 4, 8, 11, 15, 18, 22.
Date <u>7th July 1881</u>	2nd. On the plating during the process of riveting	
Order for Ordinary Survey No. <u>247</u>	3rd. When the beams were in and fastened, and before the decks were laid...	
Date <u>1st July 1881</u>	4th. When the ship was complete, and before the plating was finally coated or cemented...	
No. <u>247</u> in builder's yard.	5th. After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.)

The workmanship in this vessel is good, and she has been built of steel in accordance with the approved Trawings, in number attached herewith, and with the instructions contained in the Secretary's letters of the 17th & 24th June, 1st 20th & 28th July, 7th Aug, 26th Nov. 1880 and 28th Mar. 1881. The steel, of which this vessel has been built, has been tested at the manufacturer's works, as allowed by the Committee by Secretary's letter of the 7th July 1880, and as set forth in the Circulars issued by them. And special surveys were also made by upon the material of which this vessel is constructed, in accordance with instructions contained in Secretary's letters of the 22nd March, 2nd & 21st April 1881, and the steel subsequently approved by the Committee.

Open Bridge house 136 ft long, with side houses and casing around engine & boiler openings under. House aft 54 ft x 17 ft. Side houses ahead foremast 30 ft x 9 ft. House on fore end of bridge 14 ft x 9 ft.

State if one, two, or three decked vessel, and the lengths of open bridge, foremast, or rudder post deck, (if double bottom, state particulars on separate form.)

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

I am of opinion this Vessel should be Classed 100A1 "spar decked" "steel" "2 steel decks"

The amount of the Entry Fee ... £ 5 : : is received by me, C. J. Dodd

Special ... £ 123 : 17 : 6 29/8/ 1881

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

(Travelling Expenses, if any, £ 9 : 9 : 0)

Committee's Minute

Surveyor to Lloyd's Register of British and Foreign Shipping.

This vessel has been built in accordance with the approved plans and it is submitted for the favorable consideration of the Committee to be classed 100A1 Steel Spar Decked.

Tuesday, September, 13th 1881.

100A1 Steel Spar Decked 2 steel decks

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