

IRON SHIP.

No. *2855* Survey held at *Dumbarton* Date, First Survey *18th Dec^r 1879* Last Survey *6th Nov^r 1880*
 On the *S.S. "Persian Monarch"* 4 masts Master *Duncombe*

TONNAGE, *2855.00* ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of Third, Spar, or Arming Deck.
 Ditto of Poop, *16.60*
 Ditto of Forecastle, *336.96*
 Ditto of Forecastle, *51.15*
 Gross Tonnage *3308.11*
 Less Crew Space *98.95*
 Less Engine Room *1058.59*
 Register Tonnage as cut on Beam *2150.57*

HALF BREADTH (moulded) *21.35*
 DEPTH from upper part of Keel to top of Upper Deck Beams *28.25*
 GIRTH of Half Midship Frame (as per Rule) *44.95*
 1st NUMBER *94.45*
 1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet *87.45*
 LENGTH *350.5*
 2nd NUMBER *313.50*
 PROPORTIONS—Breadths to Length *8.43*
 Depths to Length—Upper Deck to Keel *12.10*
 Main Deck ditto *17.15*

Built at *Dumbarton*
 When built *1880* Launched *8th Dec^r 1880*
 By whom built *A. McMillan*
 Owners *Ref. Exchange Ship Co. Ltd.*
 Port belonging to *London*
 Destination *New York*
 If Surveyed while Building, Afloat, or in Dry Dock.
While Building & afloat

LENGTH	Feet.	Inches.	BREADTH	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
on deck as per Rule	<i>350.5</i>		Moulded	<i>46.5</i>		top of Floors to Upper Deck Beams	<i>28.25</i>		<i>500</i>		<i>34</i>	<i>4 with shade deck beams</i>
Do. do. Main Deck Beams						Do. do. Main Deck Beams	<i>16.9</i>					
Dimensions of Ship per Register, length, <i>360</i>			breadth, <i>43.1</i>			depth, <i>28.05</i>						
KEEL, depth and thickness												
STEM, moulding and thickness												
STERN-POST for Rudder do. do.												
" for Propeller												
Distance of Frames from moulding edge to moulding edge, all fore and aft												
FRAMES, Angle Iron, for $\frac{1}{2}$ length amidships												
Do. for $\frac{1}{2}$ at each end												
REVERSED FRAMES, Angle Iron												
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships												
thickness at the ends of vessel												
depth at $\frac{1}{2}$ the half-birth, as per Rule												
height extended at the Bilges												
BEAMS, Upper, <i>Spar</i> or <i>Lower</i> Deck												
Single or double Angle Iron, Plate or Tee Bulb Iron												
Average space												
BEAMS, <i>Middle</i> Deck												
Single or double Angle Iron, Plate or Tee Bulb Iron												
Average space												
BEAMS, <i>Lower</i> Deck, <i>Hold</i> , or <i>Orlop</i>												
Single or double Angle Iron, Plate or Tee Bulb Iron												
Average space												
KEELSONS Centre line, single or double plate, box, or Intercestral Plates												
Rider Plate												
Bulb Plate to Intercestral Keel												
Angle Irons												
Double Angle Iron Side Keelson												
3 Side Intercestral Plate												
do. Angle Irons Vertical												
Attached to outside plating with angle iron												
BULGE Angle Irons												
do. Bulb Iron												
do. Intercestral plates riveted to plating for full length												
BILGE STRINGER Angle Irons												
Intercestral plates riveted to plating for length												
SI E STRINGER Angle Irons												
Tri oms, material. Knight-heads. Hawse Timbers.												
Win lass <i>Patent</i> Pall Bitt												

The *FRAMES* extend in one length from *Port to Bilge and to deck*
 The *REVERSED ANGLE IRONS* on floors and frames extend *from middle line to Wing Plate and alternately to Main and to Deck*
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 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 *7/8* in. diameter, averaging *3 1/2* 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 *3* Strakes at Bilge for *2/3* 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 *1 3/8* in. diameter, averaging *4 1/2* ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *1 3/8* in. diameter, averaging *4 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 *1/2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *1/2* length amidships.
 Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length amidships.
 Breadth of laps of plating in double riveting *6 3/4* Breadth of laps of plating in single riveting *6 3/4*
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Part treble. Part double*
 Interway, how secured to Beams *Gutter Waterways* (Explain by Sketch, if necessary.)
 Sides of the various Decks, how secured to the sides? *Angled knees ends* No. of Breasthooks, *Iron* Crutches, *Three*
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Westons. Stickton. Coates.*
 Manufacturer's name or trade mark, *Westons. Stickton. Coates. "Parker"*
 Is there a correct description? *Yes*
 Surveyor's Signature, *C. McMillan* Surveyor to Lloyd's Register of British and Foreign Shipping

IRON 496-0306

Lloyd's Register
 Foundation

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed where practicable*
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? *Very few* 28380 *Swan*

Masts, Bowsprit, Yards, &c., are *of Iron & 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 are built in accordance with*

the approved sketch, see Secretary's letter of the 8th April 1880.
The Iron for masts is from the Glasgow Iron Company and was
tested in accordance with the requirements of the Rules.

NUMBER for EQUIPMENT 39,298		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.	
SAILS.		CABLES, &c.											
N ^o .		Chain					Bower Anchors						
			300	2 7/8	7 1/2	300 Lat. Dipton	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	40-2-14	36-0-2-14	40 cwt.	Dipton	
	Fore Sails,	(State Machines where Tested, Date, or No. of Certificate, & Name of Superintendent.)	5 Feb 1880	107 1/2	2 7/8	signed		1	40-1-14	36-0-2-14	Total 114 cwt.	Dipton	
	Fore Top Sails,	Iron Str'm Chain	90 1 3/16	25 3/8	90 1 3/16	by	5 Feb, 2 July, 5 Mar, 29 April, 5 May & 5 June, 1880.	1	7-2-2 1/2	34-1-0	31-16-1-0	Signed by	
	Fore Topmast Stay Sails,	Ditto do.	2nd July 1880	38	13/16	E. R.			6-1-7				
		Hmptn Strm Cbl	120-15" Steel wire		12"	Isitt	Stream	...	1 12-2-0	14-6-1-0	12 cwt.	E. R.	
		Hawser ...	2-100 3" Steel wire		12"		Kedge	...	1 2-2-0	8-10-0-0	6---	Isitt.	
		Towlines	...		12"			...	1 6-1-0				
			...		12"			...	1 1-1-0				
	Main Sails,		120 12" Manilla		8"		Ditto	...	1 3-0-12	5-12-0-2 1/2	3---	---	
	Main Top Sails,	Warp	120 10" James Lums		8"				3-0				
	and spare quality good		200 20-25" 4-21-0-6"										

Standing and Running Riggings *Wire & hemp* sufficient in size and *g^d* in quality. She has *2* Long Boat and *4* others.
The Windlass is a *Patent* - *good* Capstan *good* and Rudder *good* Pumps *good & efficient*
Engine Room Skylights. How constructed? *Trak on Iron Comings* How secured in ordinary weather? *By Bolts*
What arrangements for deadlights in bad weather? *Deadlights hinged to skylight*
Coal Bunker Openings. How constructed? *Cast Iron* How are lids secured? *Bar out fastenings* Height above deck? *Flush*
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *On main deck there are 6 scuppers and 7 ports each side, and on shade deck the bulwarks are open.*
Cargo Hatchways. How formed? *as usual, plate & angle iron*
State size *Main Hatch 19' 4" x 10' 2"* Fore hatch *11' 10" x 8' 4" x 6' 8"* Quarter hatch *8 ft x 8 ft.*
If of extraordinary size, state how framed and secured? *not of extraordinary size.*
What arrangement for shifting beams? *One plate frame beam*
Hatches, If strong and efficient? *Yes*

Order for Special Survey No. <i>1433</i>	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>1879: Dec 18, 22, 26; 1880: Jan 12, 18, 19, 27, 29,</i>
Date <i>March 31/80</i>	2nd. On the plating during the process of riveting	<i>Feb 10, 16, 23; Mar. 2, 8, 11, 18, 22, 26, 30; Apr. 5, 12,</i>
Order for Ordinary Survey No. <i>9</i>	3rd. When the beams were in and fastened, and before the decks were laid...	<i>19, 22, 28; May 4, 14, 21, 24, 27, 31; June 3, 6, 7, 14, 17, 21, 24,</i>
Date <i>1880</i>	4th. When the ship was complete, and before the plating was finally coated or cemented...	<i>28; July 1, 5, 8, 12, 15, 20, 29; Aug 2, 6, 9, 12, 16, 19, 20, 23, 25;</i>
No. <i>227</i> in builder's yard	5th. After the ship was launched and equipped	<i>Sept 2, 7, 8, 13, 16, 20, 23, 27, 30; Oct 2, 6,</i>

General Remarks (State quality of workmanship, &c.)
The workmanship is good. She is built in accordance with the eight tracings attached herewith, and as approved by the Committee, see Secretary's letters of the 9th Oct., 24th Nov., 6th 10th & 23rd Dec 1879 and 19th Jan, 5th & 10th Feb, 8th April, 27th May, 17th & 21 June 1880.
The double bottom extends for the length of 292 ft., divided into 3 separate compartments with one space of frame for wells to each compartment, and the capacity of the double bottom is 600 Tons. Each compartment was tested in accordance with the requirements of the Rules.

She has a shade deck constructed as approved, and the openings are forward - 84 ft x 20 ft and aft 94 ft x 20 ft as per approved sketch of shade deck. Instead of pillars in hold there is a fore aft B.H. 5 1/16 thick stiffened with double T bars 8 x 3 x 8/16, 4 ft apart.

State if one, two, or three decked vessel, or if open, or covering deck, and the length of poop, fore-castle, or raised quarter deck, and the length of double, or part double bottom. 292 ft.

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

I am of opinion this Vessel should be Classed **100 A.I. "2 Iron Shes." "Shelter deck." "Three-Decked Rule"*

The amount of the Entry Fee ... £ 5 : : : is received by me, *105 4: 6 Nov 1880*
Special ...
Certificate ... *limited*

(Travelling Expenses, if any, £9.9.0.)
Committee's Minute *Tuesday, November 4th 1880.*

Character assigned *100 A.I. 1 shelter deck*
Lloyd's Register