

3 Decks.

## IRON OR STEEL STEAMER.

No. 5400

State if Report is also sent on the Machinery of the Vessel

Date of completion of report

Port of

Received at London Office

FRI. MAR 21 1902

Survey held at

Date, First Survey

5/12/00

Last Survey

15/3/02

18

On the

Steel Twin S.S. Ruwari

Rig Brigantine

TONNAGE under Tonnage Deck...

THREE DECKED VESSEL.

Master W. P. Dickwick

Do. between Tonnage Dk. and 3rd and 4th Dk.)

CLASS 100A.I. Shelter Sk.

Year of appointment

(1) As Master in service of owner of present vessel:—18—  
(2) As Master of this vessel:—18—

Total under Upper Dk.

House 47.17  
le 114.50  
m Dk. 212.60  
Hatchways 7.94  
m of 6443.58  
ge 135.38  
on of 28.00  
FEES 6336.20  
om 2061.95  
Spaces 76.24  
age 4170.01Half Breadth (moulded) 27.5  
Depth from upper part of Keel to top of Upper Deck Beams 34.48  
Girth of Half Midship Frame (as per Rule) 57.6  
deduct 7 feet 119.58  
112.58  
1st Number 112.58  
Length 447.96  
2nd Number 50431  
Proportions—Breadth to Length 8.14  
Depth to Length—Upper Deck to top of Keel 12.99  
Main Deck ditto 16.6Built at Belfast  
When built 1901-2. Launched 24 Dec 1901  
By whom built Workman Clark & Co Ltd.  
Owners Tyser & Co  
Managers Tyser & Co  
Residence London  
Port belonging to London

Destined Voyage London via Barry If Surveyed while Building Afloat, or in Dry Dock Yes

Deck Feet. Inches. BREADTH—Moulded 55 0 DEPTH top of Floors to Upper Deck Beams 30 5 3/4  
Do. do. Main Deck Beams 21 5 3/4  
hip per Register, Length 450 breadth 55.25 depth 30.28. Moulded depth, ft. 33 ins. 1 1/4 To Upper Dk. Round up of Beam, Upper Dk. 13 1/2 ins.

FRAMING.				FORGINGS or CASTINGS.				Inches in Ship.				Inches per Rule. Or as Approved.						
								Flat plate										
es, or $\frac{1}{2}$ E or $\frac{1}{2}$ Bars for $\frac{1}{2}$ length				7	3 1/2	10	7	3 1/2	10	12 1/2 x 3 1/4				12 1/2 x 3 1/4				
ships				7	3 1/2	9	7	3 1/2	9	10 x 8				as app'd sketch				
each end				5 1/2	3 1/2	10	9	3 1/2	10	10 1/2				as app'd				
f Double Bottoms at Solid Floors				26			26			8				sketch.				
" at intermdt. Bkts.				8	3 1/2	10	9	8	3 1/2	10								
frames from moulding edge to				11 1/4			11 1/4											
ge, all fore and aft																		
FRAME, Angles																		
ING, depth of girder																		
th and thickness of Floor Plate																		
line for $\frac{1}{2}$ length amidships																		
f Engines and Boilers																		
s at the ends of vessel																		
the half breadth, as per Rule																		
extended at the Bilges																		
RACKETS in Cell Dble Bottoms				48		9.8	48		9.8									
Distance apart				26			26											
DER, in Double bottom, depth				48		11.9	48		11.9									
ickness				4	4	10.9	4	4	10.9									
Angles, Top				5	5	12.10	5	5	12.10									
Bottom				2		9.8	2		9.8									
RS, number and thickness				3 1/2	3 1/2	10.9	3 1/2	3 1/2	10.9									
Angles				4 1/2	11	36	11											
TE, depth (exclusive of flange)				4	4	10.4	4	4	10									
ickness				36		11.9	36		11.9									
Angles																		
OM PLATING, breadth and																		
ickness of Middle Line Strake																		
in Engine and Boiler space																		
Remainder in Holds																		
er Deck, Single Angle, Bulb				8 x 3 1/2 x 3 1/2	12	11	8 x 3 1/2 x 3 1/2	12	11									
e, Plate or Tee Bulb																		
s on upper edge				26			26											
ge space				9 3/2	13	9	9 3/2	13										
le Deck, Single Angle, Bulb																		
e, Plate or Tee Bulb																		
s on upper edge				26			26											
ge space				52			52											
er Deck, Single Angle, Bulb				9 3/2	13	9	9 3/2	13										
e, Plate or Tee Bulb																		
s on upper edge				52			52											
ge space				10			10											
or Orlop, Plate or Tee Bulb																		
s on upper edge				52			52											
ge space				10			10											
Deck, Angle, Bulb Angle, Plate				9 3/2	13	9	9 3/2	13										
Bulb																		
on upper edge				52			52											
ge space				10			10											
Deck, Angle, Bulb Angle, Plate				9 3/2	13	9	9 3/2	13										
Bulb																		
on upper edge				52			52											
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on upper edge				52			52											



PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.				BUTTS.								
	AMIDSHIP.		FORWARD.		AFT.		AMIDSHIP.		EDGES.		BUTTS.		BUTTS.		BUTTS.				
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.	Breadth.	Thickness.			
FLAT PLATE KEEL (If Bar Keel, state Riveting)	16	22	15	14	46	22-15	Double	6 3/4	1 1/8	4 3/8	Double	1 1/8	3 1/2	2 1/2	15-14				
GARBOARD OR A Strake	48	17	14	14		17-14	"	6	1	4 1/8	"	1	3 1/2		10 1/2	Full.			
State actual thickness in way of Double Bottom.																			
B		12	11	13		12-10	"	5 1/4	7/8	3 3/4	"	7/8	3 1/8		9	"			
C		13	13	14		14-11	"	"	"	"	"	"	"		9	"			
D		12	11	14		13-10	"	"	"	"	"	"	"		9	"			
E		13	12	12		14-11	"	"	"	"	"	"	"		9	"			
F		13	10	14		13-10	"	"	"	"	"	"	"		9	"			
G		14	11	14		14-11	"	"	"	"	"	"	"		10 1/2	"			
H		13	10	13		13-10	"	"	"	"	"	"	"		9	"			
J		14	11	12		14-11	"	"	"	"	"	"	"		10 1/2	"			
K		13	10	12		13-10	"	"	"	"	"	"	"		9	"			
L		14	11	12		14-11	"	"	"	"	"	"	"		10 1/2	"			
M		13	10	12		13-10	"	"	"	"	"	"	"		9	"			
N		14	11	13		14-11	"	"	"	"	"	"	"		10 1/2	"			
O		15	10	10		15-10	"	"	"	"	"	"	"		14 1/4	"			
P		16	11	11	46	16-11	"	5 1/4	7/8	3 3/4	"	7/8	3 1/8		9	"			
Q		12	9	9		12-9	"	"	"	"	"	"	"		14 1/4	"			
R		14	10	10		14-10	"	"	"	"	"	"	"						
DOUBLING of Flat Plate Keel	Increased thickness in lieu																		
Length of Bilges	Increased thickness in lieu																		
Length and thickness of Sheerstrakes	Increased thickness in lieu																		
Length of Strake below	Increased thickness in lieu																		
POOP SIDES	Insulated.																		
BRIDGE SIDES	Insulated.																		
FORECASTLE SIDES	Insulated.																		

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c. *Lanarkshire Steel Co. South Durham. Rolled as per Rule.*

Upper Deck Butts, riveted for *half* length amidship.

Stringer Plate Butts, riveted for *whole* length amidship.

Middle Deck Butts, riveted for *3/4* length amidship.

Stringer Plate Butts, riveted for *whole* length amidship.

Butts of Bilge & Side Stringers and Tie Plates, riveted for *whole* length amidship.

Inner Bottom Plating, riveting of Edges *Double* Butts *Double*.

Centre Girder Butts, riveted *Keelson* Butts, riveted.

Frames, riveted through Plates with *1 1/8* in Rivets, about *7 1/2* apart.

Rivets, state whether Iron or Steel *Iron*.

FRAMES extend in one length from *centre girder* to *margin plate* & from *margin plate* to *gunwale*.

REVERSED FRAMES on floors and frames extend from *centre girder* to *margin plate* & from *margin plate* to *4.2* for *12* amidships and as per Rule elsewhere.

MASTS, SPARS, &c.											
	Material.	Total Length.	DIAMETER AND THICKNESS.				No. of Plates in Journal.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Heads.	Heel.		Number.	Size.		
LOWER MASTS.	Fore	Steel	102	25 x 9/16	2 1/2 x 9/16	22 x 9/16	20 x 7/16	2	3	3 1/2 x 3 1/2	Spl.
	Main	"	17.6	26 x 9/16	25 x 9/16	21 x 7/16	18 1/4 x 7/16	"	"	"	"
	Mizen	"									

Bowsprit

Topmasts, Yards and Remainder of Spars, *Fore yard steel remainder pitch pine*

Rigging, Material and Size, Shrouds *Steel wire 4 1/2, 3 1/2, 3*

Sails, *One* Suit of *Square* Sails, and the following spare sails *3 staysails, 1 lower topsail, 2 try sails.*

EQUIPMENT No. 60263 LETTER C.F.										ANCHORS.									
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.		WEIGHT OF STOCK.		TEST, PER CERTIFICATE.		WEIGHT REQ. BY RULE.		Description of Anchor.	Makers.	Where and when tested and Superintendent.							
		Cwts.	lbs.	Cwts.	lbs.	Cwts.	lbs.	Cwts.	lbs.										
358	1st Bower	78	10	Stocks	54	17	2	0	77	2	0	Byssop & Co. Ltd. 24/10/01. H.T. Woodford.							
983	2nd "	74	3	"	54	12	2	0	71	2	0	" 17/10/02 "							
982	3rd "	65	3	"	51	7	2	0	65	3	0	" 17/10/02 "							
	Collective weight	221	3	7					220	3	0								
46516	Stream	20	2	5	4	3	23	21	5	3	21	20	2	0	Iron stock				
46462	Kedge	10	0	27	2	2	16	12	4	1	14	10	0	0	"				
	2nd Kedge																		

CHAIN CABLES.										HAWERS AND WARPS.									
Number of Certificate.	Fathoms.	Size.	WEIGHT OF CHAIN CABLE.		Fathoms and Size per Rule.	Description.	Makers of Cables.	When and where tested, and Superintendent.	Material.	Fathoms.	Size.	Breaking Test of Steel Wire Rope.	Fathoms and Size per Rule.						
			Supplied.	Per Rule.															
31464	150	2 1/8	149	12	20	446	3	24	890	1	4	300	2 1/8	Std. W. Huxley & Sons L.P.H.N. 22/10/02					
31477	"	"	106	18	0	443	3	17	"	"	"	30	1/2	" 30/1/02 "					
	120	5	65																

Boats *2 Life & 2 others*

Pumps, Number *1 Downton & 1 Lift*

Windlass is *Iron patent*

Engine Room Skylights. How constructed? *Steel casing*

What arrangements for deadlights in bad weather? *Steel covers & dead lights*

Coal Bunker Openings. How constructed? *Steel casings* How are lids secured? *Patented down* Height above deck? *18"*

Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. *Open rails to shelter deck*

Ceiling in Holds, thickness and material *2 1/2 W.P.* Ceiling 'tween Decks, thickness and material *2" W.P.*

Cargo Hatchways. How formed? *Steel casings* Hatches, If strong and efficient? *Yes.*

State size No. 1 Hatch (Forward) *19.4 x 16.0* No. 2 Hatch *25.10 x 16.0* No. 3 Hatch *19.4 x 16.0* No. 4 Hatch *21.6 x 16.0*

Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch *2 Shifting beams in No 2 & 4 and 1 in 1 & 3*

3 fore and afters in each hatch. No. of Breasthooks *9* No. of Crutches *3* Deep floors.

Bulwarks, height above deck and description *Open rails* Main Rail, material and size

The above is a correct description.

Builder's Signature (here only) *PER WORKMAN, CLARK & Co. Limited*

Surveyor's Signature *S. J. Milton*

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

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with this case)

M. 11/12/00, 20/12/00, 2/4/01, 11/4/01, 30/5/01, 18/10/01, 5/3/02

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed & capped.*

Is the riveted work properly closed? *Yes*

Are the liners between the frames 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 plating? *Very few*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes*

General Remarks (State quality of workmanship, &c.) *This vessel has been built under Special Survey, in accordance with the Rules and the approved plans. The workmanship and materials are good. The decks and waterways have been flooded and tested by a hose, as required by the Rules, with satisfactory results. The watertight doors and pumps have been worked and found to be efficient. The sluice valves fitted. The holds Nos 1, 2 & 4 are insulated.*

The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *ft.*, R.Q.D. or Break *ft.*, Bridge Dk. *ft.*, F'castle *ft.* (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated *Complete Shelter Deck.*

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) *2 Decks (Stc) and Shelter Deck (Stc-W3) and deep framing*

Official No. *2*; Signal Letters *Portland Cement & Paint Outside* *Paint*

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

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system *Cell. D.B.*

Where fitted.	Length.	Water Capacity.	Where fitted.	Length.	Water Capacity.
Double bottom, aft,	121.4	360	Fore peak tank,		
Double bottom, forward,	203.8	705.280	After peak tank,	17.4	80
Double bottom, under Engines and Boilers,	62.10	280.708	Midship deep tank,		
Double bottom, if under Engines only,			Other tanks, if fitted,		
Double bottom, if under Boilers only,		1345	(If necessary, furnish further information by sketch.)		

State whether the above have been tested as required by the Rules. *Yes*

Order for Special Survey No. *462*

Date *24 Dec 1900*

Order for Ordinary Survey No. *183*

Date *183*

No. *183* in builder's yard.

1st. On the several parts of the frame, when in place, and before the plating was wrought, *5/12/00, 1901, Jan. 24, 7.21, Feb. 13, 15, 18, Mar. 24, 25, 26, Apr. 14*

2nd. On the plating during the process of riveting, *11.15, 17.19, May 1, 3.6, 13.15, 20.23, 27.28, 30, June 5.6, 14.17, 19, 20, 27, 28*

3rd. When the beams were in and fastened, and before the decks were laid, *July, 2.5, 10, 23, Aug 2.6, 7.9, 14, 20, 23, 29, Sep 6.10, 14, 13, 20, 23, 24, 30, Oct 2.4, 8, 11*

4th. When the ship was complete, and before the plating was finally coated or cemented, *22, 29, 30, Nov 2.6, 8, 13, 15, 19, 21, 26, 27, 29, Dec 3.5, 11, 13, 16, 21, 24, 1902, Jan 4, 5*

5th. After the ship was launched and equipped, *13, 16, 17, 22, 23, 31, Feb 3.5, 7, 11, 17, 18, 26, 27, 28, Mar. 3.5, Total No. of Visits 103*

The amount of Entry Fee *5 : 0 : 0* Fees applied for, *17/3 1902*

Special Survey Fee *1/3 : 8 : 0* Received by me, *29/3/02*

Travelling Expenses, if any *£ 2.4.0*

I am of opinion this Vessel should be Classed *100A1 Steel Shelter Dk.*

With, or without Freeboard, as condition of Class *Without*

Committee's Minute *TUES. MAR 25 1902*

Character assigned *100A1 Steel Shelter Dk*

Surveyor to Lloyd's Register of British and Foreign Shipping. *S. J. Milton*

Builder's Signature (here only) *PER WORKMAN, CLARK & Co. Limited*

Surveyor's Signature *S. J. Milton*

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