

Date of completion of report

22

Survey held at **DUNDEE**

On the **S.S. RAY** (Spec of Single, Double or Triple Screw)

TONNAGE under **PERN: 7858**
Tonnage Deck...

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

Total under Upper Dk. 461.77

Do. by Poop

Do. of R.Q. Dk. **90.54**

Do. of Bridge House **25.21**

Do. of Forecastle **21.63**

Do. of Houses on Dk. **13.32**

Do. of excess of Hatchways **25.53**

Do. above Crown of } **28.26**

Engine Room .. }

Gross Tonnage 666.26

ss Crew Space **37.31**

ss above Crown of } **28.26**

Engine Room .. }

TONNAGE FOR FEES.. 600.69

ss Engine Room **257.97**

ss Navigation Spaces **36.28**

TON. ABOVE CROWN OF E.R. **28.26**

gister Tonnage 334.70

ss cut on Beam .. }

LENGTH ON DECK
as per Rule **170 0**

BTH—
Moulded

NUMBER 125479

170.15' x 29.0' x 11.35'

Breadth

Depth, at

Transvers

Length on

Longitudi

Depth "d,

Proportion

Destined

With or Without
Disconnected Erections.

Macville
STEEL STEAMER.

TRU DEC. 24. 1914

Received at London Office

Date of completion of report

22 DEC 1914

Port of

DUNDEE

No. 7858.

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

no.

Date, First Survey 17th April, 1914. Last Survey 21st December, 1914.

Rig 3 MAST SCHOONER.

STEEL SCREW STEAMER "RAY"

CLASS + 100 A.I.

FERT.

Master

Year of appointment

(1) As Master in service of
owner of present vessel:—191
(2) As Master of this
vessel:—191

Built at

Dundee

When built

1914

Launched 19th Nov. 1914.

By whom built

Dundee S.B. Co. Ltd.

Owners

M. A. Ray & Son.

Managers

(Where necessary to be entered in Reg. Book.)

Residence

London.

Port belonging to

London.

Destined Voyage Hull for Machinery If Surveyed while Building, Afloat, or in Dry Dock yes.

Length on Deck	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH, ACTUAL—	Feet.	Inches.	No. of Decks with flat laid
as per Rule	170	0	Moulded	29	0	Top of Floors to top of Upper Dk. Beams	13	6	one.
						do. do. Second Dk. Beams			one.
Moulded depth, ft. ins. To Bridge Dk. Round of Upper 7 1/4 ins.									
Moulded depth, ft. ins. To Upper Dk. Dk. Beam, Actual									

FRAMING.						PILLARS.					
Inches in Ship.						Inches in Ship.					
FRAME, Angles or Bars amidships	4 1/2	3	35	4 1/2	3	PILLARS, In 'tween Deck, size and spacing	2 1/2	3 1/2	44	2 1/2	3 1/2
Do. in peaks	4 1/2	3	34	4 1/2	3	" Hold					
Do. in way of Double Bottoms at Solid Floors	3	3	28	3	3	" Quarter 'tween Dks.					
" at intermdt. Bkts.	3 1/2	3	30	3 1/2	3	" in Hold					
acing of Frames from centre to centre	22			22		KEELSONS & STRINGERS.					
AMES AT R. Q. Dk. B. A.	6	3	38	6	3	CENTRE LINE KEELSON, Vertical Plate above			36	32	36
" ORD. Floor length to Collision bulkhead	6	3	38	6	3	" Rider Plate					
" IN E. & B. SPACE	6	3	38	6	3	" Flat Plate Keel Angles	12		36	12	36
EVERSED FRAME, Angles						" Horizontal Plates on Floors	3 1/2	3	34	3 1/2	3
Do. in way of Double Bottoms at Solid Floors	3	3	28	3	3	" Angles or Bulb Angles	2		2		
" at intermdt. Bkts.						SIDE KEELSONS, Number	5	4	50	5	4
RAMING, depth of girder	16 1/2	B.S. SPACE	16 1/2	B.S. SPACE		" Angles or Bulb Angles					
LOORS, depth and thickness of Floor Plate	30		28	30		" Plate above floors, for length			34	32	34
" at mid-line for 1/2 length amidships	E.S. 32 1/2	B.S. 42	E.S. 32 1/2	B.S. 42		" Intercoastal Plate, for E & B. S. length	3	3	32	3	3
" in way of Engine and Boiler Spaces			128			" Attached to outside Plating with Angle					
" thickness at the ends of vessel	13 1/2					BILGE KEELSON, Angles					
" depth at 1/2 the half breadth, as per Rule	17 1/2					" Intercoastal Plate for length					
" height extended at the Bilges						" Attached to outside Plating with Angle					
LOORS in Cell. Double Bottoms						SIDE STRINGERS, Number					
" state if flanged (top & bottom)	44	22	44	22		" Angle					
" Spacing of Solid floors	30	36	30	36		" Intercoastal Plate, for length					
CENTRE GIRDER, in Dbl. bottom, dpth. & thcknss.	3 1/2	3 1/2	36	3 1/2	3 1/2	" Attached to outside plating with Angle					
" Angles, Top						Upper Deck Stringer Plate, br'dth & thickness	65	46	32	46	32
" Bottom	3	3	28	3	3	" (clear of Bridge)	65		46		46
" to Floors	18		28	18		" br'dth & thickness	3 1/2	3 1/2	44	3 1/2	3 1/2
" Brackets at intermdt. frmg., wdth & thcknss	1		28	1		" (in way of Bridge)	3	3	34	2	3
DE GIRDERS, number on each side & thickness						" Angle (clear of Bridge)					
" state if flanged (top and bottom)	3	3	28			" Tie Plate at sides of Hatchways					
" Angles (top and bottom)	2 1/2	2 1/2	28	2 1/2	2 1/2	" Deck. * Iron or Steel, for FULL lng.			28		28
" to Floors	21		30	21		" Thickness (clear of Bridge)			25		25
MARGIN PLATE, depth (exclusive of flange)	3	3	30	3	3	" (in way of Bridge)					
" and thickness	3	3	28	3	3	" Wood Deck. Material & thickness					
" Angles to Outside Plating	18		28	18		Second Deck Stringer Plate, br'dth & thickness					
" Floors	32		32			" Angles on ditto, No.					
" Brackets at intermdt. frmg., wdth & thcknss	30		34	30		" Tie Plates outside Hatchways					
NER BOTTOM PLATING, breadth and thickness of Middle Line Strake						" Deck. * Iron or Steel, for lng.					
" in Engine and Boiler space						" Wood Deck. Material & thickness					
" Remainder in Holds			32			Third Deck Stringer Plate, br'dth & thickness					
AMS, Upper Deck, Single Angle, Bulb	5 1/2	3	34	5 1/2	3	" Angles on ditto, No.					
" Angle, Plate, Tee Bulb, or Channel						" Tie Plates, outside Hatchways					
" In way of Long Bridge	22			22		" Deck. * Material and thickness					
" Spacing						Fourth and Fifth Deck Stringer Plate, breadth & thickness					
AMS, Second Deck, Single Angle, Bulb						" Angles on ditto, No.					
" Angle, Plate, Tee Bulb, or Channel						" Tie Plates outside Hatchways					
" Spacing						" Deck. * Material and thickness					
AMS, Third and Fourth Deck, Single Angle,						QUARTER POOP Deck Stringer Plate, breadth & thickness	62 1/2	40	32	40	32
" Bulb Angle, Plate, Tee Bulb, or Channel						" Angle on ditto	3	3	40	3	3
" Angles on upper edge						" Tie Plates					
" Spacing						" Deck. Material and thickness	25	26	25	25	25
BEAMS, Poop Deck, Angle, Bulb Angle, Plate,	5 1/2	3	34	5 1/2	3	Bridge Deck Stringer Plate, br'dth & thickness	31	26	31	26	
" Tee Bulb, or Channel						" Angle on ditto	3	3	26	3	3
" Angles on upper edge	5	3	34	5	3	" Tie Plates					
" Spacing	22			22		" Deck. Material and thickness	P.P. 5	3	P.P. 5	3	
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate,	5	3	34	5	3	Forecastle Deck Stringer Plate, br'dth & th'kns	16	26	16	26	
" Tee Bulb, or Channel						" Angle on ditto	3	3	26	3	3
" Angles on upper edge	44			44		" Tie Plates					
" Spacing	44			44		" Deck. Material and thickness	P.P. 5	3	P.P. 5	3	
BEAMS, Forecastle Deck, Angle, Bulb Angle,	6 1/2	3	44	6 1/2	3	If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon					
" Plate, Tee Bulb, or Channel						Lloyd's Register Foundation					
" Angles on upper edge											
" Spacing	44			44							

[illegible]

EQUIPMENT No. 7900				LETTER C				ANCHORS.				TONNAGE U.K. OR PLATING R. FOR TRAWLERS.			
Number of Certificate.	Anchor.	Weight, Ks. Stock	Weight of Stock	Test, per Certificate.			Weight Required by Table 31.			Description of Anchor.	Makers.	Where and when tested and Superintendent.			
		Owts. qrs. lbs.	Owts. qrs. lbs.	Tons. cwt. qrs.	lbs.		Owts. qrs. lbs.								
42844	1st Bower ...	14 2 14	STOCKLESS	16	3	1	21	14	2	0	HALL STOCKLESS	J. WRIGHT & Co. Ltd.	TIPTON 31 st Aug. 1914		
42845	2nd " ...	14 2 0	D ²	16	1	1	0	14	2	0	D ² . D ² .	D ²	D ² D ²		
42796	3rd " ...	12 3 21	D ²	14	12	3	7	12	3	0	D ² . D ² .	D ²	D ² 20 th Aug. 1914		
	4th " ...												1 st 2 nd BOWERS - C.E. PERRIN		
	Collective weight	42 0 7						41	3	0			3 rd BOWER - J.M. PURSALL		
15820	Stream	4 1 6		1	0	10	6	12	2	0	ORDINARY W.I.	J. WRIGHT & Co. Ltd.	C.H. 2 nd Dec. 1914 F.C. PAUL		
18221	Kedge	2 0 0		0	2	4	4	10	0	0	D ² D ²	D ²	D ² D ² D ²		
U. Island date Name of Vessel.															
U. Stockless, etc. Mechanical Test.															
CHAIN CABLES.															
Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.		Length and size per Table 31.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.	Breaking Test Wire Towing.	Length and size per Table 31.			
	Fathoms. Ins.	Stations. Break- ing. Tons.	Owts. qrs. lbs.	Owts. qrs. lbs.	Fathoms. Ins.					Fathoms. Ins.	Tons.	Fathoms. Ins.			
58897	195 1/2 1 1/2	25 1/4 38	143 2 25	141 2 14	195 1 1/2	STUD LINK	—	N. 4 th Dec. 1914 H.C.B.	TO WIRE	75 2 1/4	15 1/2	90 6			
									HAWSERS & WARPS	90 6		90 6			
Stream (See Chapter Steel Wire)	60 3 18	✓			60 3			CRAYN & SPEEDING BRO'S, SOL. 16 th Jan. 1914	" "						
HAWSERS AND WARPS.															
Boats Two lifeboats and one dinghy															
Pumps, Number 2 in hold and 1 in fore peak															
Windlass is Emerson, Walker & Thompson.															
Engine Room Skylights. How constructed? Steel plates & angles															
What arrangements for deadlights in bad weather? Steel plates, brass glass, & rubber.															
Coal Bunker Openings. How constructed? Cast iron															
How are lids secured? Screwed															
Height above deck? 18" below.															
Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. 5 Stoppers each side, F.P. 2 in. F.W. 3-6"x1'-9", 3 in. R.P. (D.C. 2'-9"x1'-6"															
Ceiling in Holds, thickness and material 2 1/2" white pine.															
Cargo Battens, thickness and material NONE FITTED															
Cargo Hatchways. How formed? Steel plates and angles															
Hatches, If strong and efficient? Yes - 3' solid.															
State size No. 1 Hatch (Forward) 22'-0" x 18'-0" No. 2 Hatch 29'-6" x 18'-0" No. 3 Hatch ✓ No. 4 Hatch ✓															
Number of Web Plates, Shifting Beams and Lugs and Afters to each Hatch 3 to No. 1. and 5 to No. 2. No fore and after.															
No. of Breasthooks none No. of Crutches none.															
Bulwarks, height above deck and description Main deck 3'-9" Quarter deck 3'-6" Main Rail, material and size. Steel 5' x 2 1/2" x 30 B. L.															
The foregoing is a correct description. FOR THE BUILDING CO., LTD.															
Builder's Signature (see index)															
Surveyor's Signature James Carmichael & M. Blackwood															
Surveyor's License Register of British and Foreign Shipping.															

Correspondence.—State dates and initials of letters respecting this case (*Reference should be made in any correspondence connected with the case*) 23-3-14, 19,
1-4-14, 19, 29-5-14, 19, 12-12-14, 19.

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed and lapped.*
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 the plating? *No.*
Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Overlapped and properly strapped*
Have all the upper and weather decks been tested as required by the Rules (Sec. 26, par. 20)? *Yes.* State results of tests *Satisfactory*
Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)? *Yes.* State results of tests *Satisfactory*

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

This Vessel has been built under special survey in accordance with the approved plans, the Secretary's letter referred to, and in general conformity with the Rules for the Class contemplated. The materials and workmanship are sound and good.

This image shows a single sheet of cream-colored paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

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

The amount of Entry Fee £ 2 : - : -	Fees applied for,	Certificates to be sent to <i>London</i>	Date of issue <i>26th/1/16</i>
Special Survey Fee £ 30 : 1 : -	10		
Trafficalling Expenses, if any £ : : -	Received by me, <i>24/12/14</i>		

State whether the Vessel has been built under Special Survey *Yes*

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

James Carnaghan & M. Blackwood

With, or without Freeboard, as condition of Class *1st class* *Freeboard* *1000*
 Committee's Minute *FRI. FEB. 5, 1915*
 Character assigned *Deferred* *FRI. FEB. 26, 1915*
Wm. H. L.
Write no fees. *W. N.* *1000* *subject*
Pl. 1000

+ L.M.B. 1.15
 W.

GENERAL REMARKS—(continued).

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. 96.0 ft., Bridge 14.67 ft., Forecastle 21.5 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated *Raised Quarter Deck joined to Bridge*.

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) *1 D^g (STL.)*

Official No. _____; Signal Letters _____ State if Machinery is fitted aft *Machinery Aft.*
How are the surfaces preserved from oxidation? Inside *Portland cement and paint* Outside *Paint.*

PARTICULARS OF WATER BALLAST. State whether the Double bottom is constructed on the cellular system or with girders on floors.

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fore peak tank,	<i>APR. 18</i>	<i>55</i>
Double bottom, under Engines and Boilers,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	After peak tank,	<i>APR. 6</i>	<i>5</i>
Double bottom, if under Engines only,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Deep tank, aft,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Double bottom, if under Boilers only,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Deep tank, forward,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Double bottom, forward,	<i>100.83</i>	<i>140.5</i>	Other tanks, if fitted,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Total capacity of double bottom	<i>140.5</i>	(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks.

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

Order for Special Survey No. _____

Date *15th April 1914.*

No. *271* in builder's yard.

1914.
APR. 17, 23, 25, MAY 6, 13, 19, 20, 21, 22, 25, 28 JUNE 4, 9, 11, 15, 18, 22, 24, 30, JULY 1, 7, 9, 13, 16, AUG.
9, 11, 13, 17, 18, 24, 26, 30 SEP 2, 4, 8, 10, 14, 17, 21, 24, 28, 30 OCT. 6, 9, 13, 16, 19, 21, 22, 23, 26, 28 NOV. 3, 4
5, 9, 11, 13, 16, 19, 20, 24, 27 DEC. 1, 4, 8, 9, 11, 12, 14, 15, 21.

Surveyor's Signatures *James Cunningham & M. Blackwood*

Total No. of Visits *72*

Rpt. 5b.

Date of work

No. in Reg. Book

Master

Boiler m

Owners

VERTI

Made at

tested by h

No. of saf

enter the d

strength 27

Lap of pla

Radius of

Thickness

plates 5

Thickness

Dates of Survey while building

GENER

Th

M

low

12

Surv

Trav

Comm

Assign