

With or Without
Disconnected Erections.

STEEL STEAMER.

FUE. 30 JAN. 1917

Received at London Office

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

Date of completion of report

Survey held at

On the (State if Single, Twin, or Triple Screw)

TONNAGE under

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

Total under Upper Dk.

Do. of R.Q.Dk.

Do. of Bridge Houses

Do. of Forecastle

Do. of Houses on Dk.

Do. of excess of Hatchways

Do. above Crown of

Gross Tonnage

Less Crew Space

Less above Crown of

Less Engine Room

Less Navigation Spaces

Register Tonnage

as cut on Beam

CLASS

FEET.

Master

Year of appointment

Built at

When built

Launched

By whom built

Owners

Managers

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

Residence

Port belonging to

Destined Voyage

LENGTH on Deck as per Rule	Feet.	Inches.	BREADTH—Moulded	Feet.	Inches.	DEPTH, ACTUAL—Top of Floors to top of Upper Dk. Beams	Feet.	Inches.	No. of Decks with flat laid
321	0	43	0	19	5 1/2	19	5 1/2	10 1/4	one

Dimensions of Ship per Register. Length 321.2 breadth 43.25 depth 19.5

FRAMING.	Inches in Ship.	Inches in Ship.	Inches in Ship.	Inches in Ship.	Inches in Ship.	Inches in Ship.
FRAME, Angles, or Bars amidships	9	3 1/2	66	9	3 1/2	66
Do. in peaks	6	3	38	6	3	38
Do. in way of Double Bottoms at Solid Floors	3 1/2	3 1/2	38	3 1/2	3 1/2	38
Spacing of Frames from centre to centre amidships	21			21		
length to Collision bulkhead	21 and 24			21 and 24		
in peaks	BULB ANGLE FRAMES					
REVERSED FRAME, Angles	3 1/2	3 1/2	38	3 1/2	3 1/2	38
Do. in way of Double Bottoms at Solid Floors	3 1/2	3 1/2	38	3 1/2	3 1/2	38
FRAMING, depth of girder	38	48	36	38	48	36
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	46	and	54	36	and	44
in way of Engine and Boiler Spaces	36			36		
thickness at the ends of vessel						
depth at 1/2 the half breadth, as per Rule						
height extended at the Bilges	as above					
FLOORS in Cell. Double Bottoms	no			no		
state if flanged (top & bottom)	21	24	27	21	24	27
Spacing of Solid floors	48	x	48	48	x	48
CENTRE GIRDER, in Dbl. bottom, depth & thickness	38	3 1/2	44	38	3 1/2	44
Angles, Top	3 1/2	3 1/2	44	3 1/2	3 1/2	44
Bottom	4	4	56	4	4	56
to Floors	3 1/2	3 1/2	36	3 1/2	3 1/2	36
Brackets at intermdt. frmg. width & thickness	one		34	one		34
SIDE GIRDERS, number on each side & thickness	no			no		
state if flanged (top and bottom)	3 1/2	3 1/2	36	3 1/2	3 1/2	36
Angles (top and bottom)	3 1/2	3 1/2	36	3 1/2	3 1/2	36
to Floors	FLANGED					
MARGIN PLATE, depth (exclusive of flange) and thickness	52	3 1/2	40	33	x	40
Angle to Outside Plating	3 1/2	3 1/2	40	3 1/2	3 1/2	40
Floors	3 1/2	3 1/2	36	3 1/2	3 1/2	36
Brackets at intermdt. frmg. width & thickness	36			36		
Height of Outside Brackets above at bilge	42	x	52	38	x	46
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	83	x	46	44	and	52
in Engine and Boiler space	50			46	and	42
Remainder in Holds	82	3	46	82	3	46
BEAMS, Upper Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel	27	and	21	27	and	21
Spacing	82	3	46	82	3	46
BEAMS, Second Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel	27	and	24	27	and	24
Spacing	82	3	46	82	3	46
BEAMS, Third and Fourth Deck, Single Angle, Bulb Angle, Plate, Tee Bulb, or Channel	6 1/2	3	44	6 1/2	3	44
Angles on upper edge	27			27		
Spacing	82	3	46	82	3	46
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel	42			42		
Angles on upper edge						
Spacing						

PILLARS.		Inches. Size in Ship.	Inches. Spacing in Ship.	Inches per Rule. Or as	Inches per Rule. Approved.	
PILLARS, in 'tween Decks , size and spacing						
"	Hold	"	"			
"	Quarter 'tween Dks.	"	"			
"	in Hold	"	"			
		Large brackets 40 thick in line of hold pillars as per plan.				
KEELSONS & STRINGERS.		Inches in Ship.	Inches in Ship.	Inches in Ship.	Inches per Rule. Or as	Inches per Rule. Approved.
CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate)						
"	Rider Plate.....					
"	Flat Plate Keel Angles					
"	Horizontal Plates on Floors					
"	Angles or Bulb Angles					
SIDE KEELSONS, Number						
"	Angles or Bulb Angles					
"	Plate above floors, for length....					
"	Intercoastal Plate, for length					
"	Attached to outside Plating with Angle ...					
BILGE KEELSON, Angles						
"	Intercoastal Plate for length					
"	Attached to outside Plating with Angle ...					
SIDE STRINGERS, Number						
"	Angle					
"	Intercoastal Plate, for length					
"	Attached to outside plating with Angle.....					
Upper Deck Stringer Plate, br'dth & thickness) (clear of Bridge)		45	40	45	40	
"	" " " br'dth & thickness) (in way of Bridge)	6 x 6	60	6 x 6	60	
"	" " Angle (clear of Bridge) ...					
"	" " Tie Plate at sides of Hatchways	40	30	40	30	
"	Deck. * Iron or Steel, for FULL lng.	44	33	where exposed		
"	" Thickness (clear of Bridge)	40		40		
"	" " (in way of Bridge)					
"	Wood Deck, Material & thickness					
Second Deck Stringer Plate, br'dth & thickness)		40	64	40	64	
"	Angles on ditto, No. One	42	42	56	42	56
"	Tie Plates outside Hatchways					
"	Deck. * Iron or Steel, for FULL lng.	40	30	40	30	
"	Wood Deck, Material & thickness	44	33	where exposed.		
Third Deck Stringer Plate, br'dth & thickness						
"	Angles on ditto, No.					
"	Tie Plates, outside Hatchways.....					
"	Deck. * Material and thickness					
Fourth and Fifth Deck Stringer Plate. } breadth & thickness }						
"	" " Angles on ditto, No.					
"	" " Tie Plates outside Hatchways					
"	" " Deck. Material & thickness					
Poop Deck Stringer Plate, breadth & thickness						
"	Angle on ditto					
"	Tie Plates					
"	Deck. Material and thickness					
Bridge Deck Stringer Plate, br'dth & thickness		43	36	43	36	
"	Angle on ditto.....	3 x 3	36	3 x 3	36	
"	Tie Plates					
"	Deck. Material and thickness Steel.	30 and 33	where exposed.	30		
Forecastle Deck Stringer Plate, b'dth & th'kns		30	32	30		
"	Angle on ditto.....	3 x 3	32	3 x 3		
"	Tie Plates					
"	Deck. Material and thickness Steel.	28	32	28	32	
		with 5" x 2 1/2" p.p.				
* If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon.						

If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon.

W169-0112112

WEB FRAMES.				FORGINGS or CASTINGS.			
Inches in Ship.				Inches in Ship.			
WEB-FRAMES, In Fore Body, No. and spacing				KEEL, Bar, depth and thickness			
" " " " brdth. & thickness				FLAT PLATE KEEL.			
" " " " No. of Side Stringers				STEM, moulding and thickness			
WEB-FRAMES, In E. & B. Space, No. and spacing				STERN-POST for Rudder do. do.			
" " " " brdth. & thickness				" " " " for Propeller			
WEB-FRAMES, In After Body, No. and spacing				RUDDER—A x D* Table 22. Speed			
" " " " brdth. & thickness				Main-Piece, diameter at head			
" " " " No. of Side Stringers				" " " " at heel			
Size of Face Angles to Web-Frames.....				RUDDER, how constructed			
BRACKET PLATES to Stringers between Web Frames, depth and thickness.....				" " " " Thickness of Single Plate			
BULKHEADS.				STIFFENERS.			
Number, Thickness, Horizontal, Vertical, Single or Double Frames, Height up state deck.				Number, Thickness, Horizontal, Vertical, Single or Double Frames, Height up state deck.			
W.T. BULKHEADS				STIFFENERS			
BOLTER ROOM, 2				32 1/2 x 28			
ENG. ROOM, 5				34 1/2 x 30			
AFTER PERM				38 1/2 x 34			
" COLLISION "				34 1/2 x 30			
PARTITION "				34 1/2 x 30			
LONGITUDINAL "				34 1/2 x 30			
Are the outside Plates doubled two spaces of Frames in length?				Are the outside Plates doubled two spaces of Frames in length?			
Are the Sliding Watertight Doors in efficient working order?				Are the Sliding Watertight Doors in efficient working order?			
PLATING.				RIVETING.			
AS IN SHIP.				EDGES.			
STRAKES.				Ordinary or Joggled?			
Breadth, Thickness, Thickness, Thickness.				Breadth, Thickness, Thickness, Thickness.			
FLAT PLATE KEEL.....				Double			
GARBOARD or A Strake				Double			
State actual thickness in way of Double Bottom.				Double			
B "				Double			
C "				Double			
D "				Double			
E "				Double			
F "				Double			
G "				Double			
H "				Double			
I "				Double			
J "				Double			
K "				Double			
L "				Double			
M "				Double			
N "				Double			
O "				Double			
P "				Double			
Q "				Double			
R "				Double			
S "				Double			
T "				Double			
U "				Double			
V "				Double			
W "				Double			
THICKNESS OF SHEET PILE				THICKNESS OF SHEET PILE			
CLEAR OF LONG BRIDGE				CLEAR OF LONG BRIDGE			
Do. of STRAKE BELOW				Do. of STRAKE BELOW			
DELT. of Flat Plate Keel				DELT. of Flat Plate Keel			
Sheerstrakes				Sheerstrakes			
Length and thickness				Length and thickness			
POOP SIDES				POOP SIDES			
SHORT BRIDGE SIDES				SHORT BRIDGE SIDES			
FORECASTLE SIDES				FORECASTLE SIDES			
Upper Deck				Upper Deck			
Stringer Plate				Stringer Plate			
P. Q. R.				P. Q. R.			
Second Deck				Second Deck			
Stringer Plate				Stringer Plate			
Frames, riveted through Plates with				Frames, riveted through Plates with			
Rivets, state whether Iron or Steel				Rivets, state whether Iron or Steel			
FRAMES extend in one length from				FRAMES extend in one length from			
REVERSED FRAMES on floors and frames extend from				REVERSED FRAMES on floors and frames extend from			
MASTS, SPARS, &c.				MASTS, SPARS, &c.			
Material, Total Length, Diameter and Thickness, No. of Plates in Round, ANGLES, Riveting.				Material, Total Length, Diameter and Thickness, No. of Plates in Round, ANGLES, Riveting.			
LOWER MASTS.....				LOWER MASTS.....			
Bowsprit				Bowsprit			
Topmasts, Yards and Remainder of Spars				Topmasts, Yards and Remainder of Spars			
Rigging, Material and Size, Shrouds				Rigging, Material and Size, Shrouds			
Sails.				Sails.			

EQUIPMENT No. 2212-94				ANCHORS.				TONNAGE U.D.K. OR PLATING No. FOR TRAWLERS			
Number of Certificate.				Description of Anchor.				Where and when tested and Superintendent.			
22621				1st Bower				Byers			
22604				2nd "				"			
22578				3rd "				"			
22466				4th "				"			
22465				Kedge				"			
CHAIN CABLES.				HAWERS AND WARPS.							
Number of Certificate.				Length and size supplied.				Where and when tested, and Superintendent.			
12399				240 1 1/2				Bloomer			
Boats				Steering Gear, Steam				Steering Gear, Hand			
Pumps, Number				Diameter of Barrel				State whether they are in efficient working order			
Windlass is				Capstan							
Engine Room Skylights.—How constructed?				What arrangements for deadlights in bad weather?				Slack flaps with butyl tape			
Coal Bunker Openings.—How constructed?				How are lids secured?				Lids secured by bolts			
Number of Scuppers, and numbers and dimensions of Freeing Ports, &c.				Scuppers, and numbers and dimensions of Freeing Ports, &c.							
Ceiling in Holds, thickness and material				Cargo Batts, thickness and material							
Cargo Hatchways.—How formed?				Hatches, If strong and efficient?							
State size No. 1 Hatch (Forward)				No. 2 Hatch				No. 3 Hatch			
No. 4 Hatch				No. 5 Hatch				No. 6 Hatch			
Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch				No. of Breasthooks				No. of Crutches			
Bulwarks, height above deck and description				Main Rail, material and size							
The foregoing is a correct description.				Surveyor's Signature				Surveyor's Signature			
Builder's Signature (here only)				Director							
Correspondence.—State dates and initials of letters respecting this case				Reference should be made in any correspondence connected with the case							
Workmanship. Are the butts of plating planed or otherwise fitted?				Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?				Are the rivet holes well and sufficiently countersunk in the plate and punched from the facing surfaces?			
Are the butts of Plating, Stringers, &c., properly shifted and staggered?				Do any rivets break into or through the seams or butts of the plating?							
Have all the upper and weather decks been tested as required by the Rules (Sec. 26, par. 20)?				State results of tests							
Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)?				State results of tests							
General Remarks (State quality of workmanship, &c.)				The vessel has been constructed in accordance with the approved plans, approved materials for reference, the drawings taken, and in conformity with the Rules of the Registry, the materials and workmanship throughout being good.							
A copy of the Machinery List (as built) is enclosed.											
Please return approved plans for reference in dealing with sister vessels No 204 & 205 now building.											
Faying report for Steel Rudder Rudder frame and stem on record.											
The Surveyor should state the Number of Report and Name of any Sister Vessel.				Plans to be forwarded with F.E. Report showing vessel as built.				69063 88 "Harden"			
The amount of Entry Fee				Fees applied for,							
Special Survey Fee				Received by me.							
Travelling Expenses, if any				Date of issue							
State whether the Vessel has been built under Special Survey				I am of opinion this Vessel should be Classed							
With, or without Freeboard, as condition of Class				Surveyor to Lloyd's Register of Shipping.							
Committee's Minute				Character assigned							
Cargo bases, not found											
Lloyd's A.R.C.O.											
+ L.M.B. 1.17.											

GENERAL REMARKS—(continued).

WEB FRAMES, In Fore
No of Side String
WEB-FRAMES, In E. & F
WEB-FRAMES, In After
No. of Side String
Size of Face Angle
RACKET PLATES to
Web Frames, depth and

BULKHEADS. Vessel

T. BULKHEADS 4
CABIN ROOM 2
ENGINE ROOM 5
FORE PEAK

COLLISION,,
PARTITION,,
LONGITUDINAL,,

the outside Plates
the Splice Values

STRAKES.

FLAT PLATE KEEL...
If Bar Keel, state Rivet
STARBOARD OR A ST

State actual
thickness in
of Double
Bottom.

B
C
D
E
F
G

UPPER DISH

ARTER do J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

AA

AB

AC

AD

AE

AF

AG

AH

AI

AJ

AK

AL

AM

AN

AO

AP

AQ

AR

AS

AT

AU

AV

AW

AX

AY

AZ

BA

BB

BC

BD

BE

BF

BG

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. 185.7 ft., Bridge 63 ft., Forecastle 32 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated

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 in the Register Book) *one deck (Steel)*
Official No. 133590; Signal Letters
How are the surfaces preserved from oxidation? Inside *Paint & cement* State if Machinery is fitted aft *No*
Outside *Paint*

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

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	94.48	260	Fore peak tank,	25.04	130
Double bottom, under Engines and Boilers,	40.50	140	After peak tank,	18.00	15
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,	128.25	295	Other tanks, if fitted,		
Total capacity of double bottom		695	(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. 4563

Date 14.12.1914

No. 191 in builder's yard.

DATES of Surveys held while building

1915
Mar. 12. 16. 19. 23. 29. Apr. 1. 8. 13. Jul. 12. 22. Aug. 13. 24. Sep. 1. 9. 14. 17. 20. 30. Dec.
14. 28 Jan. 18. Feb. 4. Mar. 6. 10. 16. 29. Apr. 11. May 15. 29. Jun. 7. Jul. 18. 24. 28. Aug.
11. Feb. 6. 15. 26. Oct. 5. 19. Nov. 6. Dec. 5. 14 Jan. 6. 10. 15. 17. 18.

Total No. of Visits 50

Surveyor's Signature *M. Macdonald & H. C. P. Macdonald*

