

Date of writing Report *26th Dec 17* when handed in at Local Office *10* Port of *Belfast*

No. in Survey held at *Belfast* Date, First Survey *27-1-16* Last Survey *19-12-1917*
 Reg. Book. *S.S.S. Port Darwin* (Number of Visits *105*) Gross *10365*
 on the *S.S.S. Port Darwin* Tons *7804*
 Master *R. P. Craven* Built at *Belfast* By whom built *Warkman Clark Bayly* when built *1917*
 Engines made at *Belfast* By whom made *-* when made *-*
 Boilers made at *-* By whom made *-* when made *-*
 Registered Horse Power *-* Owners *Commonwealth & Dominion Lines Ltd* belonging to *-*
 Nom. Horse Power as per Section 28 *809* Is Refrigerating Machinery fitted for cargo purposes *Yes* Is Electric Light fitted *Yes*

ENGINES, &c.—Description of Engines *Four Screw Triple Expansion* Cylinders *6* No. of Cranks *6*
 Dia. of Cylinders *22½ - 38 - 63½* Length of Stroke *45* Revs. per minute *80* Dia. of Screw shaft *as per rule 13½* Material of *S. Steel*
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube *Yes* Is the after end of the liner made water tight
 in the propeller boss *Yes* If the liner is in more than one length are the joints burned *Yes* If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes* If two
 liners are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *4'-9½"*
 Dia. of Tunnel shaft *as per rule 12.07* Dia. of Crank shaft journals *as per rule 13.67* Dia. of Crank pin *13½* Size of Crank web *19½ x 9* Dia. of thrust shaft under
 collars *13½* Dia. of screw *16'-6"* Pitch of Screw *17'-9"* No. of Blades *3* State whether moveable *Yes* Total surface *80 sq. ft.*
 No. of Feed pumps *1 each engine* Diameter of ditto *5½* Stroke *24* Can one be overhauled while the other is at work *Yes*
 No. of Bilge pumps *1 each engine* Diameter of ditto *5½* Stroke *24* Can one be overhauled while the other is at work *Yes*
 No. of Donkey Engines *See separate sheet* No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room *5'-3½"* In Holds, &c. *12'-3½" & 1'-2½"*

No. of Bilge Injections *2* sizes *8"* Connected to condenser, or to circulating pump *Pumps separate* Donkey Suction fitted in Engine room & size *1'-3½"*
 Are all the bilge suction pipes fitted with roses *Yes* Are the roses in Engine room always accessible *Yes* Are the sluices on Engine room bulkheads always accessible *Yes*
 Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Both*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates *Yes* Are the Discharge Pipes above or below the deep water line *Both*
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel *Yes* Are the Blow Off Cocks fitted with a spigot and brass covering plate *Yes*
 What pipes are carried through the bunkers *Fore hold Suctions* How are they protected *Wood Casings*
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*
 Dates of examination of completion of fitting of Sea Connections *25-5-17* of Stern Tube *9-7-17* Screw shaft and Propeller *9-7-17*
 Is the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Top platform E. Room*

BOILERS, &c.—(Letter for record *3*) Manufacturers of Steel *Seachurn & Co. & J. Spencer & Sons*

Total Heating Surface of Boilers *11960 sq. ft.* Is Forced Draft fitted *Yes* No. and Description of Boilers *4 Single End Cylinders*
 Working Pressure *200 lbs* Tested by hydraulic pressure to *400 lbs* Date of test *29-6-17* No. of Certificate *503*
 Can each boiler be worked separately *Yes* Area of fire grate in each boiler *73½ sq. ft.* No. and Description of Safety Valves to
 each boiler *Two Direct Spring* of each valve *11.04 sq. in.* Pressure to which they are adjusted *200 lbs* Are they fitted with easing gear *Yes*
 Smallest distance between boilers or uptakes and bunkers or woodwork *24"* Mean dia. of boiler *5'-10½"* Length *12'-6"* Material of shell plates *Steel*
 Thickness *1½"* Range of tensile strength *30-33½ tons* the shell plates welded or flanged *No* Descrip. of riveting: cir. seams *Lap & Bt.*
 long. seams *Butt Lap* Diameter of rivet holes in long. seams *1 7/16"* Pitch of rivets *10½"* Lap of plates on width of butt straps *22 7/16"*
 Per centages of strength of longitudinal joint *90.6* Working pressure of shell by rules *231 lbs* Size of manhole in shell *16" x 12"*
 Size of compensating ring *M. Seale* No. and Description of Furnaces in each boiler *4 Marine water-tube* Steel Outside diameter *44½"*
 Length of plain part *top 3' bottom 3'* Thickness of plates *top 3 5/8" bottom 3 5/8"* Description of longitudinal joint *Weld* No. of strengthening rings *1*
 Working pressure of furnace by the rules *227 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *3/16"* Back *1/16"* Top *3/16"* Bottom *1/16"*
 Pitch of stays to ditto: Sides *8 5/8" x 8 5/8"* Back *9" x 8"* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *206 lbs*
 Material of stays *Steel* Diameter at smallest part *1 7/8"* Area supported by each stay *72 sq. in.* Working pressure by rules *221 lbs* and plates in steam space:
 Material *Steel* Thickness *1 3/16"* Pitch of stays *20 x 15"* How are stays secured *Nuts & Washers* Working pressure by rules *208 lbs* Material of stays *Steel*
 Diameter at smallest part *1 9/16"* Area supported by each stay *310 sq. in.* Working pressure by rules *241 lbs* Material of Front plates at bottom *Steel*
 Thickness *1"* Material of Lower back plate *Steel* Thickness *1 1/8"* Greatest pitch of stays *3 3/4" x 8 5/8"* Working pressure of plate by rules *231 lbs*
 Diameter of tubes *2½"* Pitch of tube *3 3/4" x 3 5/8"* Material of tube plate *Steel* Thickness: Front *5/16"* Back *1/16"* Mean pitch of stays *7 1/2" x 7 1/4"*
 Pitch across wide water spaces *13½"* Working pressures by rules *203 lbs* Girders to Chamber tops: Material *Steel* Depth and
 thickness of girder at centre *(0.575) x 2* Length as per rule *34½"* Distance apart *9"* Number and pitch of stays in each *8-8"*
 Working pressure by rules *234 lbs* Superheater or Steam chest; how connected to boiler *-* Can the superheater be shut off and the boiler worked
 separately *-* Diameter *-* Length *-* Thickness of shell plates *-* Material *-* Description of longitudinal joint *-* Diam. of rivet
 holes *-* Pitch of rivets *-* Working pressure of shell by rules *-* Diameter of flue *-* Material of flue plates *-* Thickness *-*
 If stiffened with rings *-* Distance between rings *-* Working pressure by rules *-* End plates: Thickness *-* How stayed *-*
 Working pressure of end plates *-* Area of safety valves to superheater *-* Are they fitted with easing gear *-*

Sails. _____

7. 2.

R. B. Bennett

pt. 8.

RE

Date of writ

No. in
Reg. Book.

811

TONN

GROSS

UNDER DE

NET

Surveye

WB=C

total ca

N.B.

of the tank

girders, an

Last

Periodica

cause of

on accou

and besi

replacen

the back

In damag

they v

REPAIR

Leh

Nov

St

H

Py

Sc

21

Th

W

Re

SUMMARY

Ren

Ren

Fai

PRESENT

Decks

Caulking

Waterway

Coamings

Beams &

Outside Pl

Caulking

Rivets

Breasthoo

Transoms

Frames

Reverse E

Floors

Keelsons

Gen

th

st

Survey

Special

Travelli

Second

Com

Cha

Foundation

10th 1918—Transfer Ink

(The Surveyors are requested not to write on or below the space for Committee's Minutes.)

Survey

Special

Travelli

Second

Com

Cha

Foundation

10th 1918—Transfer Ink

(The Surveyors are requested not to write on or below the space for Committee's Minutes.)

Survey

Special

Travelli

Second

Com

Cha

Foundation

10th 1918—Transfer Ink

(The Surveyors are requested not to write on or below the space for Committee's Minutes.)