

REPORT ON BOILERS.

No. **6635**

Received at London Office

THUR. 2 JUL 1909

Date of writing Report **3rd July 1909** When handed in at Local Office

Port of **Belfast**

No. in Survey held at **Belfast**
Reg. Book.

Date, First Survey **5th May 1908** Last Survey **30th June 1909**

(Number of Visits) **31** Gross **12124**

on the **S.S. "Astrants"**

Tons Net **7433**

ster Built at **Belfast**

By whom built **Workman Clark & Co. Ltd.** When built **1909**

ines made at **Belfast**

By whom made

When made

ilers made at

By whom made

When made

gistered Horse Power **✓**

Owners **Queen's Steam Navigation Co. Ltd.** Belonging to **Belfast**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel **Workman Clark & Co. Ltd.**

etter for record **5**) Total Heating Surface of Boilers **Simple End 6378 sq ft** As forced draft fitted **Yes** No. and Description of

ilers **Two-Simple End Cylindrical** Working Pressure **215 lbs** Tested by hydraulic pressure to **430 lbs** Date of test **26-7-09**

of Certificate **415** Can each boiler be worked separately **Yes** Area of fire grate in each boiler **738 sq ft** No. and Description of

ety valves to each boiler **Two-Swivel Spinning** Area of each valve **9.62 sq ft** Pressure to which they are adjusted **215 lbs**

o they fitted with easing gear **Yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **✓**

allest distance between boilers or uptakes and bunkers or woodwork **about 20"** Mean dia. of boilers **16'-4 1/2"** Length **11'-6"**

aterial of shell plates **Steel** Thickness **1 1/8"** Range of tensile strength **31 1/2 - 35 tons** the shell plates welded or flanged **No**

scrip. of riveting: cir. seams **Long. & X** long. seams **Butt & Lap** Diameter of rivet holes in long. seams **1 1/8"** Pitch of rivets **10"**

of plates or width of butt straps **23 1/2"** Per centages of strength of longitudinal joint rivets **102.5** Working pressure of shell by

es **251 lbs** Size of manhole in shell **16" x 12"** Size of compensating ring **M^cNeill** No. and Description of Furnaces in each

ler **4-Sight flue** Material **Steel** Outside diameter **44 1/4"** Length of plain part top **2'** Thickness of plates crown **3 1/2"** bottom **3 1/4"**

escription of longitudinal joint **Weld** No. of strengthening rings **✓** Working pressure of furnace by the rules **234 lbs** Combustion chamber

tes: Material **Steel** Thickness: Sides **5"** Back **5 1/4"** Top **5"** Bottom **1"** Pitch of stays to ditto: Sides **8 x 7 1/2"** Back **8 1/2 x 8 1/2"**

7 1/2 x 7 1/2" If stays are fitted with nuts or riveted heads **Nuts in circle** Working pressure by rules **218 lbs** Material of stays **Steel** Diameter at

allest part **1 1/2" to 1 3/8"** Area supported by each stay **68 sq in** Working pressure by rules **272 lbs** plates in steam space: Material **Steel** Thickness **1 1/4"**

ch of stays **20 1/2 x 16"** How are stays secured **to W. Manholes** Working pressure by rules **217 lbs** Material of stays **Steel** Diameter at smallest part **2 1/2" to 3 3/8"**

ea supported by each stay **330 sq in** Working pressure by rules **247 lbs** Material of Front plates at bottom **Steel** Thickness **1 1/8"** Material of

wer back plate **Steel** Thickness **1 1/8"** Greatest pitch of stays **13 1/2"** Working pressure of plate by rules **227 lbs** Diameter of tubes **2 1/2"**

ch of tubes **3 1/8" x 3 3/4"** Material of tube plate **Steel** Thickness: Front **2 1/2"** Back **1 3/8"** Mean pitch of stays **7 1/2" x 7 1/4"** Pitch across wide

ter spaces **13 1/2"** Working pressures by rules **259 lbs with 3/32" Double** Girders to Chamber tops: Material **Steel** Depth and thickness of

der at centre **9 1/4" (3/4" x 2)** Length as per rule **31 1/8"** Distance apart **8 1/4" x 7 1/2"** Number and pitch of Stays in each **3-7 1/4"**

orking pressure by rules **258 lbs** Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

eparately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

les Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

orking pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

The foregoing is a correct description,
FOR WORKMAN, CLARK & CO., LIMITED

W. A. Bell Manufacturer.

Dates) During progress of
Survey) work in shops - -)
while) During erection on
building) board vessel - -)

See other sheets

Is the approved plan of boiler forwarded herewith **Yes**

Total No. of visits **✓**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

Survey Fee ... £ **✓** : : When applied for, **✓** 19
Travelling Expenses (if any) £ : : When received, 19

R. F. Bennett
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **FRI. 30 JUL 1909**

Assigned **see minute on attached**

Bel Rpt N. 6635

FRI. 1 OCT 1909



Lloyd's Register
Foundation

17806-0052

Pumps (Independent)

2	Hotwell pumps	$9 \times 11 \times 24$
3	Main Feed pumps	$14 \times 12 \frac{1}{2} \times 26$
1	Duplex Aux ^y	$6 \times 4 \frac{1}{2} \times 9$
2	Fresh Water	$4 \frac{1}{2} \times 3 \frac{1}{2} \times 7$
1	General	$12 \times 9 \times 12$
1	Ballast	$10 \times 12 \times 10$
Set	Duplex Pumps	$7 \frac{1}{2} \times 9$
1	Duplex	$6 \times 8 \times 8$
2	Centrifugal Sanitary	5
1	Duplex Fire etc	$7 \times 7 \times 7$
1	Crane	$4 \times 4 \frac{1}{2} \times 10$