

# REPORT ON MACHINERY.

Port of

Glasgow

Received at London Office WED. 4 JUL 1900

No. in Survey held at  
Reg. Book.

Date, first Survey

Last Survey

18

on the

New Boiler for the s.s. "Eveleen"

(Number of visits)

Tons } Gross  
Net

Master

Built at

Belfast

By whom built

Wortman, Larkes &amp; Co.

When built

1891

Engines made at

Glasgow

By whom made

Muir &amp; Houston Ltd.

when made

1891

Boiler made at

Glasgow

By whom made

Harclay, Aird &amp; Co. Ltd.

when made

1900.

Registered Horse Power

90.

Owners

J. Milligan &amp; Co.

Port belonging to

Belfast

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted

Is Electric Light fitted

## ENGINES, &c.—Description of Engines

Triple

No. of Cylinders

No. of Cranks

Dia. of Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

as per rule

Lgth. of stern bush

Dia. of Tunnel shaft

as per rule

Dia. of Crank shaft journals

as per rule

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. of screw

Pitch of screw

No. of blades

State whether moveable

Total surface

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

In Holds, &amp;c.

No. of bilge injections

sizes

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room &amp; size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship

Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the discharge pipes above or below the deep water line

Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are the blow off cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers

How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

Is the screw shaft tunnel watertight

Is it fitted with a watertight door

worked from

## BOILERS, &c.—

(Letter for record)

Total Heating Surface of Boilers

1598 ft

Is forced draft fitted

none

No. and Description of Boilers

1 multitubular

Working Pressure

160

Tested by hydraulic pressure to

320.

Date of test

Can each boiler be worked separately

Area of fire grate in each boiler

160 ft

No. and Description of safety valves to

each boiler

2 Direct Flue

Area of each valve

7.0 sq

Pressure to which they are adjusted

16.5 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

16 in

Mean dia. of boilers

13.6

Length

10.6

Material of shell plates

Steel

Thickness

16

Range of tensile strength

28600

Are they welded or flanged

Neither

Descrip. of riveting: cir. seams

D. lap

long. seams

D. Butt

Diameter of rivet holes in long. seams

1 1/16

Pitch of rivets

7 1/2

Lap of plates or width of butt straps

15 7/8

Per centages of strength of longitudinal joint

rivets

88%

Working pressure of shell by rules

161 lbs

Size of manhole in shell

16" X 12"

Size of compensating ring

No. and Description of Furnaces in each boiler

3 Deighton

Material

Steel

Outside diameter

3.7

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

Weld

No. of strengthening rings

1

Working pressure of furnace by the rules

161 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

10/16

Back

10/16

Top

10/16

Bottom

10/16

Pitch of stays to ditto: Sides

8" X 9"

Back

8" X 9"

Top

8" X 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

187 lbs

Material of stays

Steel

Diameter at smallest part

1 1/4

Area supported by each stay

72"

Working pressure by rules

161 lbs

End plates in steam space

Material

Steel

Thickness

1 1/4

Pitch of stays

2 1/4" X 20"

How are stays secured

D. nuts

Working pressure by rules

164 lbs

Material of stays

Steel

Diameter at smallest part

6.1

Area supported by each stay

380"

Working pressure by rules

161 lbs

Material of Front plates at bottom

Steel

Thickness

25/32

Material of Lower back plate

Steel

Thickness

10/16

Greatest pitch of stays

13 1/2"

Working pressure of plate by rules

200 lbs

Diameter of tubes

3 1/4

Pitch of tubes

4 1/2

Material of tube plates

Steel

Thickness: Front

25/32

Back

25/32

Mean pitch of stays

9"

Pitch across wide water spaces

14 1/4

Working pressures by rules

182

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

7 3/8 X 3 1/4

Length as per rule

2.5

Distance apart

8"

Number and pitch of Stays in each

2-9"

Working pressure by rules

164 lbs

Superheater or Steam chest: how connected to boiler

none

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

Lloyd's Register  
Foundation

GL5288-0101



**DONKEY BOILER—** No. Description

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Thickness of shell crown plates Radius of do. No. of Stays to do.

Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Description of joint

Thickness of furnace crown plates Stayed by Working pressure of shell by rules

Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied :—

The foregoing is a correct description,

Signed on original Manufacturer.

Dates of Survey while building { During progress of work in shops - - During erection on board vessel - - Total No. of visits

Is the approved plan of main boiler forwarded herewith

Yes

General Remarks (State quality of workmanship, opinions as to class, &c.

This Main Boiler has been made by Messrs Barclay, Curle & Co. Ltd. The material & workmanship are of good description & test satisfactory. It has now been forwarded to Belfast to be fitted on board the vessel.

The amount of Entry Fee. . . £ : : When applied for, Special . . . . . £ : : 18. . . . . When received, Donkey Boiler Fee . . . . £ : : 18. . . . Travelling Expenses (if any) £ : : 18. . . .

Committee's Minute

Assigned

(Signed) James Hollison Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

FRI. 27 JUL 1900

FRI. 6 JUL 1900

Clude District

Lloyd's Register Foundation