

REPORT ON MACHINERY.

No. 12466

Port of *Glasgow*

MON. 25 SEP 1893

No. in Survey held at
Reg. Book.

433 on the

Date, first Survey *25th July*

Last Survey *18th Sept* 1893

Master

Built at

By whom built

Russell & Co.

Tons { Gross 405
Net 225

When built 1883-

Engines made at

By whom made

when made

Boilers made at

Glasgow

By whom made

Lindsay Bennett & Co.

when made

1893

Registered Horse Power

Owners

Evan of lake T. A. Walker

Port belonging to

London

Nom. Horse Power as per Section 28

57

R. A. S.

SS N°2-92

+ 100 15.92

+ hmc 5.92

ENGINES, &c.—

Description of Engines

No. of Cylinders

Diameter of Cylinders Length of Stroke Revolutions per minute Diameter of Screw shaft as per rule as fitted
Diameter of Tunnel shaft as per rule as fitted Diameter of Crank shaft journals Diameter of Crank pin Size of Crank webs
Diameter 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, &c.

No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & 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

946.5 sq ft

No. and Description of Boilers

One Multitubular

Working Pressure

80 lbs Tested by hydraulic pressure to *160 lbs*

Date of test

18/9/93

Can each boiler be worked separately

☒

Area of fire grate in each boiler

32.5

No. and Description of safety valves to

each boiler

☒

Area of each valve

☒

Pressure to which they are adjusted

☒

Are they fitted

with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

☒

Mean diameter of boilers

11'-0"

Length

9'-0"

Material of shell plates

Steel

Thickness

5/8"

Description of riveting: circum. seams

Lap double riveting. seams Lap triple riv

Diameter of rivet holes in long. seams

15/16

Pitch of rivets

3 3/4"

Lap of plates or width of butt straps

6 1/2"

Per centages of strength of longitudinal joint

75%

Working pressure of shell by rules

84.2 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

6" x 9 1/2"

No. and Description of Furnaces in each boiler

2 plain

Material *Steel* Outside diameter

40"

Length of plain part

5'-10"

Thickness of plates

15/32"

Description of longitudinal joint

lapped

No. of strengthening rings *(1) 3 x 3 1/2 L*

Working pressure of furnace by the rules

90.94 lbs

Combustion chamber plates: Material *Steel* Thickness: Sides

7/16"

Back

7/16"

Top

7/16"

Bottom

Pitch of stays to ditto: Sides

8" x 8"

Back

8 1/2" x 3/4"

Top

8" x 8"

If stays are fitted with nuts or riveted heads

none

Working pressure by rules

89 lbs

Material of stays

Steel

Diameter at smallest part

7/8" x 9/16"

Area supported by each stay

63.78 sq in

Working pressure by rules

96.79 lbs

Material

Steel

Thickness

1 1/16"

Pitch of stays

16"

How are stays secured

D. nuts

Working pressure by rules

83 lbs

Diameter at smallest part

2.36

Area supported by each stay

256 sq in

Working pressure by rules

88 lbs

Material of Front plates at bottom

Steel

Thickness

5/8"

Material of Lower back plate

Steel

Thickness

5/8"

Greatest pitch of stays

12 3/4"

Working pressure of plate by rules

83 lbs

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/2" x 4 1/2"

Material of tube plates

Steel

Thickness: Front

1 1/16"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

86.9 lbs

Girders to Chamber tops: Material *Iron* Depth and

thickness of girder at centre

6" x 1 1/2"

Length as per rule

26"

Distance apart

8"

Number and pitch of Stays in each

two 8"

Working pressure by rules

82 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

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

☒

☒

12466 lbs.

DONKEY BOILER— 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 _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long. seams _____ Diameter 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,

Manufacturer.

For Lindsay Burnet & Co.
A. Cameron.

General Remarks (State quality of workmanship, opinions as to class, &c. A still main boiler of the

dimensions given on the other side has been constructed under special survey by Messrs Lindsay Burnet & Co. Iron Plate Boiler works. The materials and workmanship are of good description and an hydraulic test of 160 lbs per square inch has been applied at which pressure it was found tight and satisfactory.

This boiler is intended for the Clarendon S.S. Buenos and is to be shipped to Buenos Ayres. A photo print of the boiler is appended

As this new Boiler is to be shipped to Buenos Ayres It is submitted that a copy of this report be forwarded to the Surveyors there for guidance in fitting it on board.

W.A.
25-9-93

Certificate (if required) to be sent to

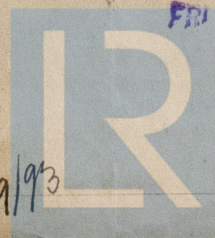
The amount of Entry Fee.. £ : : When applied for,
 Special .. £ 4 : 4 : 22/9/93
 Donkey Boiler Fee .. £ : : When received,
 Travelling Expenses (if any) £ : : 23/9/93

A.M. Keard
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

Assigned

Not for Classing Comtee
For Mr. Hill to note with copy of Rep to M. 26/9/93



TUES. 19 JUN 1894
FRI 18 JUL 1894

Lloyd's Register
Foundation