

REPORT ON MACHINERY.

Port of *Greenock*

Received at London Office

TUES. 5 DEC 1893

No. in Survey held at
Reg. Book. Supplement

Date, first Survey

Last Survey

(Number of Visits)

9 on the

Tons { Gross 859.71
Net 526.31Master *D. Carter*

Built at

By whom built

When built

Engines made at

By whom made

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

ENGINES, &c.—

Description of Engines

No. of Cylinders

Diameter of Cylinders

Length of Stroke

Revolutions per minute

Diameter of Screw shaft

Diameter of Tunnel shaft

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 & stokehold,

In Holds, &c.

No. of bilge injections

sizes

Connected to condenser, or to circulating pump

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

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of safety valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted

with casing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean diameter of boilers

Length

Material of shell plates

Thickness

Description of riveting: circum. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

bottom

bottom

bottom

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

Thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of Stays in each

Working pressure by rules

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

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 casing gear

Working pressure by rules

End plates: Thickness

How stayed

DONKEY BOILER—

Description

Round Upright.

Made at Greenock

By whom made

Scott & Coy.

When made 1893

Where fixed

Stokehold recess

Working pressure 80 lbs tested by hydraulic pressure to 160 lbs

No. of Certificate

388

Fire grate area

21.5 sq

Description of safety valves

Direct spring

No. of safety valves two Area of each 4.9 sq

Pressure to which they are adjusted

80 lbs

If fitted with easing gear

yes

If steam from main boilers can

enter the donkey boiler

Description of riveting long seams

Lap double

Diameter of rivet holes

1 3/16

Whether punched or drilled

drilled

Pitch of rivets

2 3/8

Lap of plating

4 1/2

Per centage of strength of joint

Rivets 61

Plates 71

Thickness of shell crown plates

5/8

Radius of do.

6.0

Dia. of stays

1 1/2 bars

Diameter of furnace Top

4.9

Bottom

5.4

Length of furnace

5.8

Thickness of furnace crown plates

9/16

Stayed by

as above

Working pressure of shell by rules

90 lbs

Working pressure of furnace by rules

80 lbs

Diameter of uptake

16

Thickness of uptake plates

1/2

Thickness of water tubes

1/2

SPARE GEAR.

State the articles supplied:—

2 top end & 2 bottom end bolts & nuts. 2 main beam

bolts. a set of coupling bolts. a set of feed & bilge pump valves. piston & pump

1/2 set of fire bars. 12 tubes & 24 screwed ferrules for surface condenser. a

quantity of bolts nuts & iron assorted.

The foregoing is a correct description,

Manufacturer.

Scott & Coy.

General Remarks

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

These Engines and Boilers have been specially surveyed during Construction. workmanship good. Shafts examined when being turned and found apparently sound. Main Steam pipe test by hydraulic pressure to 320 lbs per square inch, test satisfactory.

The Engines and Boilers are satisfactorily fitted on board and have been tested under full steam. they are now in good order and safe working condition, and are in my opinion eligible to be noted in Register Book. **LMC. 11.93.**

It is submitted that
this vessel is eligible for
THE RECORD + LMC. 11.93 -

PRB
5/12/93 -

Certificate (if required) to be sent to

MACHINERY CERTIFICATE
WRITTEN.

The amount of Entry Fee..

£

2:

:

When applied for,

Special

£

16:

:

When received,

Donkey Boiler Fee

£

✓:

:

Travelling Expenses (if any) £

✓:

:

FR: 8 DEC 1893

Committee's Minute

Assigned

AS. C. Heron
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Greenock District.

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Lloyd's Register
Foundation

+ LMC 11.93