

REPORT ON MACHINERY.

No. 6335

THURSDAY 29 NOV 1883

No. in Survey held at

Glasgow

Date, first Survey

March 31st 1883

Last Survey

Nov^r 14th

1883

Reg. Book.

on the

Screw Steamer "Carpin"

(Number of Visits)

26

Tons

1190

466

Master

M. Hutchison

Built at

Glasgow

By whom built

London & Glasgow C^o L^d

When built

1877

Engines made at

Glasgow

By whom made

London & Glasgow C^o L^d

when made

1877

Boilers made at

Glasgow

By whom made

The London & Glasgow C^o L^d

when made

1883

Registered Horse Power

150

Owners

W. Dixon L^d

Port belonging to

Glasgow

ENGINES, &c.—

Description of Engines

Diameter of Cylinders

Length of Stroke

No. of Rev. per minute

Point of Cut off, High Pressure

Low Pressure

Diameter of Screw shaft

Diam. of Tunnel shaft

Diam. of Crank shaft journals

Diam. 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

Where do they pump from

No. of Donkey Engines

Size of Pumps

Where do they pump from

Are all the bilge suction pipes fitted with roses

Are the roses always accessible

Are the sluices on Engine room bulkheads always accessible

No. of bilge injections

and sizes

Are they connected to condenser, or to circulating pump

How are the pumps worked

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 accessible at all times

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection 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

and fitted with a sluice door

worked from

BOILERS, &c.—

Number of Boilers

One

Description

Cylindrical - Mult^{le}

Whether Steel or Iron

Steel

Working Pressure

70 lbs

Tested by hydraulic pressure to

140 lbs

Date of test

August 14th 1883

Description of superheating apparatus or steam chest

Horizontal

Can each boiler be worked separately

Can the superheater be shut off and the boiler worked separately

No. of square feet of fire grate surface in each boiler

75 sq. ft.

Description of safety valves

Direct springs

No. to each boiler

Two

Area of each valve

21.6 sq. in.

Are they fitted with easing gear

Yes

No. of safety valves to superheater

area of each valve

Are they fitted with easing gear

Yes

Smallest distance between boilers and bunkers

2'-0"

Diameter of boilers

11'-3"

Length of boilers

16'-0"

description of riveting of shell long. seams

Double Lap

circum. seams

Double Lap

Thickness of shell plates

Diameter of rivet holes

1 1/16"

whether punched or drilled

Drilled

pitch of rivets

4 7/8"

Lap of plating

6 1/2"

Per centage of strength of longitudinal joint

78

working pressure of shell by rules

70 lbs

size of manholes in shell

16" x 12"

Size of compensating rings

4 1/2" x 3/16"

No. of Furnaces in each boiler

Six

Outside diameter

2'-9 3/4"

length, top

5'-8"

bottom

15'-6"

thickness of plates

3/8"

description of joint

Weld

if rings are fitted Corrugated

Greatest length between rings

—

working pressure of furnace by the rules

117 lbs

combustion chamber plating, thickness, sides

7/16"

back

7/16"

top

7/16"

Pitch of stays to ditto, sides

8 3/4"

back

—

top

8 3/4"

If stays are fitted with nuts or riveted heads

Nuts

working pressure of plating by rules

rules

71 lbs

Diameter of stays at smallest part

1 3/8"

working pressure of ditto by rules

100 lbs

end plates in steam space, thickness

1/16"

Pitch of stays to ditto

16"

how stays are secured

Nuts & washers

working pressure by rules

74 lbs

diameter of stays at smallest part

Greatest pitch of stays

—

working pressure by rules

—

Diameter of tubes

3 1/2"

pitch of tubes

4 3/4"

thickness of tube

plates, front

7/16"

back

7/16"

how stayed

Tubes

pitch of stays

15 1/2" x 14 1/2"

width of water spaces

5"

Diameter of Superheater or Steam chest

3'-8"

length

15'-9"

thickness of plates

7/16"

description of longitudinal joint

Lap

diam. of rivet holes

1 1/16"

Pitch of rivets

3 1/2"

working pressure of shell by rules

165 lbs

diameter of flue

—

thickness of plates

—

If stiffened with rings

—

Distance between rings

—

working pressure by rules

—

end plates of superheater, or steam chest; thickness

3/16"

how stayed

ends dished

Superheater or steam chest; how connected to boiler

By neck 16" dia

GLS148-0348

1235

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 _____ if fitted with easing gear _____ if steam from main boilers can
enter the donkey boiler _____ diameter of donkey boiler _____ length _____ description of riveting _____
Thickness of shell plates _____ diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ lap of plating _____
per centage of strength of joint _____ thickness of crown plates _____ stayed by _____
Diameter of furnace, top _____ bottom _____ length of furnace _____ thickness of 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 plates _____ thickness of water tubes _____

SPARE GEAR. State the articles supplied :—

The foregoing is a correct description,
of the London & Glasgow Engineering and
Shipbuilding Co. Ltd. Manufacturers of Main Boilers
J. Kelly Esq.

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

The new main boiler of this vessel has been
constructed under special survey - it is of good material & work-
manship - it has been satisfactorily fitted on board & tested under
steam. The approved tracing is herewith enclosed.
In consequence of this vessel having been sunk & lying under
water for some time at Bilbao the engines have been disconnected
cleaned & thoroughly overhauled. The crankshafts & shafting have been
removed & refitted & a new stern tube, shaft & propeller have been
fitted - all sea cocks & valves overhauled.
The above repairs have been satisfactorily carried out by W. Dixon
Limited - the machinery is now in good & safe working con-
dition and in our opinion eligible to be classed L.M.C. + N.B. 11-83
in the Register Book.
The report on boiler steel tests is appended hereto.

It is submitted that
this vessel is eligible to
have the notation S.M.C.
1183 + N.B. 11-83 recorded
D. & 29/11/83

The amount of Entry Fee. £ 5: 5: 0 received by me, _____
Special new Boilers £ 5: 5: 0
Special Damage £ 10: 10: 0
Donkey Boiler Fee £ _____

Certificate (if required) .. £ _____
To be sent as per margin.
(Travelling Expenses, if any, £ _____)

Committee's Minute

FRIDAY 30 NOV 1883

10th 11.83 + N.B. 11-83

James Morrison & Walter E. Robson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Glasgow

Lloyd's Register
Foundation