

REPORT ON MACHINERY.

6335

THURSDAY 29 NOV 1883

No. 6335

Received at London Office

No. in Survey held at Glasgow Date, first Survey March 31st 1883 Last Survey Nov^r 14th 1883

Reg. Book. _____ (Number of Visits 26) Tons 1190
466

on the Screw Steamer "Carpin"

Master M. Hutchison Built at Glasgow By whom built London & Glasgow Co^{rs} L^{td} When built 1877

Engines made at Glasgow By whom made London & Glasgow Co^{rs} L^{td} when made 1877

Boilers made at Glasgow By whom made The London & Glasgow Co^{rs} L^{td} when made 1883

Registered Horse Power 150 Owners W. Dixon L^{td} 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 9/16"

Diameter of rivet holes 1 1/16" whether punched or drilled Drilled pitch of rivets 4 7/8" Lap of plating 6 1/8"

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 9/16" 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 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 2 1/4" working pressure by rules 70 lbs Front plates at bottom, thickness 5/8" Back plates, thickness —

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 1/16" back 1/16" 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 15/16"

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 9/16" how stayed ends dished

Superheater or steam chest; how connected to boiler By neck 16" dia

Form No. 8-2100-22/5/83.1

Glasgow Register Foundation
 GLS148-0348

1335

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,
 W. & A. G. & Co. Engineers and
 Manufacturers of Main Boilers
 11, Abchurch Lane, London E.C. 4

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 & workmanship - 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 crank shafts & shafting have been removed & refilled & 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 condition 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 L.M.C. + N.B. 11-83 recorded
 R. P.
 29/11/83

The amount of Entry Fee. £ 5: 5: 0 received by me,
 Special new Boilers £ 5: 5: 0
 Special Donkey Boiler Fee £ 10: 10: 0
 Certificate (if required) .. £ : :
 To be sent as per margin.
 (Travelling Expenses, if any, £)

24/11/1883 James Morrison & Walter E. Robson
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

FRIDAY 30 NOV 1893

11.83 + N.B. 11

