

REPORT ON MACHINERY

43223

No. _____
 No. in Survey held at London Date, first Survey 13th Aug Last Survey Aug 30 1883
 Reg. Book. _____
373 on the S. S. Windermere (Number of Visits 6) Tons 469
 Master Williams Built at London By whom built _____ When built 1857
 Engines made at London By whom made J. Peim & Sons when made 1873
 Boilers made at Liverpool By whom made Messrs J. Jack & Co when made 1878. October
 Registered Horse Power 60 Owners Lamuda Brothers Port belonging to London

ENGINES, &c.—

Survayed in the Canal. Dry dock +A1
 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 LMC. 4.82
 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 Ret Tube Whether Steel or Iron Iron
 Working Pressure 60 lbs Tested by hydraulic pressure to 120 lbs Date of test 1878
 Description of superheating apparatus or steam chest Cylindrical, forepart in uptake
 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 31 Description of safety valves Adams No. to each boiler two
 Area of each valve 7.07 Are they fitted with easing gear yes No. of safety valves to superheater — area of each valve —
 Are they fitted with easing gear — Smallest distance between boilers and bunkers or woodwork _____ Diameter of boilers 18" 6"
 Length of boilers 8' 6" description of riveting of shell long. seams double riveted circum. seams double riveted Thickness of shell plates 5/8
 Diameter of rivet holes 7/8 whether punched or drilled punched pitch of rivets 3 1/2" Lap of plating _____
 Per centage of strength of longitudinal joint 75 working pressure of shell by rules 64 lbs size of manholes in shell 16 x 12 1/2
 Size of compensating rings 6" x 3 1/4" No. of Furnaces in each boiler two
 Outside diameter 3' 2" length, top 5' 6" bottom 7' 6" thickness of plates 1/2" description of joint lap angle rivet if rings are fitted no
 Greatest length between rings _____ working pressure of furnace by the rules 78 1/2 combustion chamber plating, thickness, sides 7/16 back 7/16 top 7/16
 Pitch of stays to ditto, sides 8 1/2 x 7 3/4 back 8 1/2 x 9 top 7 1/2 x 8 1/2 If stays are fitted with nuts or riveted heads nuts working pressure of plating by rules 72 lbs
 Diameter of stays at smallest part 1 1/8 working pressure of ditto by rules 79 end plates in steam space, thickness 9/16 x 5/8 back 5/8
 Pitch of stays to ditto 15" x 13" how stays are secured double nuts working pressure by rules 64 lbs diameter of stays at smallest part 1 3/4" working pressure by rules 75 lbs Front plates at bottom, thickness 5/8 Back plates, thickness 5/8
 Greatest pitch of stays 12" working pressure by rules 83 lbs Diameter of tubes 3 1/8 pitch of tubes 4' 8" thickness of tube plates, front 5/8 back 5/8 how stayed stay tubes pitch of stays 12 1/2" width of water spaces 11"
 Diameter of Superheater or Steam chest 2 1/2 length 7' 0" thickness of plates 1/2 description of longitudinal joint 2 rivet lap diam. of rivet holes 3/4
 Pitch of rivets 3" working pressure of shell by rules 130 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 1/2 how stayed disked
 Superheater or steam chest; how connected to boiler beck

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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,
Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. *These boilers is said to have been fitted on board in 1878 by Messrs Jack & Co of Liverpool. The information as to the testing of the boilers and a few other particulars have been obtained from Messrs Lamuda Bros the present owners.*

Took dimensions and examined boiler & found it in a good condition. The safety valves blow off at 50 lbs.

The donkey boiler was found to be in a good condition. New Ligum vita has been fitted in the stern tube & the propeller & a new key in tail shaft have been refitted.

The extreme end of the keyway contains a small flaw which does not however in any way weaken the shaft.

The seaconnections were found to be in a good condition.

As far as seen the machinery of this vessel appears to be in a safe working condition & is in my opinion eligible to have the notification B.S. 9. 83. recorded in the Register Book as well as N.B. 78.

It is submitted that this vessel is eligible to have the notification B.S. 9. 83 & N.B. 78 recorded in the Register Book as well as N.B. 78.

The amount of Entry Fee £ — : — : — received by me, _____

Special £ 3 : 3 : —

Donkey Boiler Fee £ : : : —

Certificate (if required) .. £ : 2 : 6 } 20/12 1883

To be sent as per margin.

(Travelling Expenses, if any, £)

Committee's Minute

TUESDAY 11 DEC 1883

B.S. 9. 83 N.B. 78

C. J. Stromeier
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.