

# REPORT ON MACHINERY.

8195

No. 8195

Port of Glasgow

RECEIVED 3 NOV 1887

Received at London Office

No. in Survey held at Glasgow

Date, first Survey 25<sup>th</sup> March 1884 Last Survey Oct 29<sup>th</sup> 1884

(Number of Visits 29)

1620

Book.

Tons 1044

on the S.S. Victoria

Master J. L. Martin Built at Glasgow By whom built A. Stephen & Son When built 1884

Engines made at Glasgow By whom made " " " " when made 1884

Boilers made at " By whom made " " " " when made 1884

Registered Horse Power 140 H.P. Owners MacLay, McEntyre & Managers Port belonging to Glasgow

Engines, &c. - Triple Expansion (3 Cranks)

Description of Engines Triple Expansion (3 Cranks) Diameter of Cylinders 18" 29" 46" Length of Stroke 39" No. of Rev. per minute 75 Point of Cut off, High Pressure Low Pressure

Diameter of Screw shaft 10" Diam. of Tunnel shaft 9 1/2" Diam. of Crank shaft journals 10" Diam. of Crank pin 10 1/2" size of Crank webs 4" x 11 1/2"

Diameter of screw 10" Pitch of screw 14:0" No. of blades 4 state whether moveable Yes total surface 40 sq ft

No. of Feed pumps 2 diameter of ditto 3 1/2" Stroke 21" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 diameter of ditto 4 1/2" Stroke 21" Can one be overhauled while the other is at work Yes

Where do they pump from All Compartments

No. of Donkey Engines 2 Size of Pumps 4 1/2" x 4 1/2" x 9" 8" x 8" x 8" Where do they pump from Sea Bilges Hotwell

Are all the bilge suction pipes fitted with roses Yes Are the roses always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes

No. of bilge injections One and sizes 4 1/2" Are they connected to condenser, or to circulating pumps Circulating

How are the pumps worked By Levers

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the discharge pipes above or below the deep water line Above to lead line

Are each fitted with a discharge valve always accessible on the plating of the vessel Yes Are the blow off cocks fitted with a spigot and brass covering plate Yes

Are pipes carried through the bunkers None How are they protected

Are pipes, cocks, valves, and pumps in connection with the machinery accessible at all times Yes

Are pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges Yes

Are stern tube, propeller, screw shaft, and all connections examined in dry dock On Ship before launching

Is shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Upper Deck

Boilers &c. - One Description Round Horizontal Whether Steel or Iron Steel

Pressure 160 lbs Tested by hydraulic pressure to 320 lbs Date of test 14<sup>th</sup> Sept 1884 18<sup>th</sup> Oct 1884

Are steam pipes tested to 320 lbs none

Is superheating apparatus or steam chest none

Can boiler be worked separately Can the superheater be shut off and the boiler worked separately

Area of fire grate surface in each boiler 62 sq ft Description of safety valves Direct Spring No. to each boiler Two

Are they fitted with easing gear Yes No. of safety valves to superheater area of each valve

Smallest distance between boilers and bunkers or woodwork 20" Diameter of boilers 11-6"

Description of riveting of shell long. seams Double Straps Double riveted circum. seams Treble riveted Thickness of shell plates 1 1/16"

Whether punched or drilled Drilled pitch of rivets 4/16" Lap of plating Straps 1 1/2" x

Length of longitudinal joint 83 3/4" working pressure of shell by rules 166 lbs size of manholes in shell 14 1/2" x 13 1/2"

Are staying rings McNeil's patent doors with ring fitted No. of Furnaces in each boiler Four

Length, top 3-4" bottom 4" thickness of plates 1 1/32" description of joint Corrupted if rings are fitted

Working pressure of furnace by the rules 162 lbs combustion chamber plating, thickness sides 1 1/32" back 9/16"

Are stays fitted with nuts or riveted heads Nuts working pressure of plating by

Diameter of stays at smallest part 1 1/2" working pressure of ditto by rules 190 lbs end plates in steam space, thickness 1 3/32"

How stays are secured By double nuts working pressure by rules 167 lbs diameter of stays at

Smallest part 2 3/4" = 4.91" working pressure by rules 140 lbs Front plates at bottom, thickness 1 1/16" Back plates, thickness

Working pressure by rules Diameter of tubes 3 1/2" pitch of tubes 4 3/4" x 4 5/8" thickness of tube

How stayed By tube pitch of stays 9 1/2" x 1 1/4" width of water spaces about 6"

Lloyd's Register Foundation

5820-451579

8195 905

**DONKEY BOILER**— Description *Round Vertical (Cross tube)*  
 Made at *Glasgow* by whom made *A Stephenson's* when made *1884* where fixed *Above main boiler*  
 Working pressure *140 lbs* tested by hydraulic pressure to *140 lbs* No. of Certificate *1869* fire grate area *24 sq ft* description of safety valves *Direct Spring* No. of safety valves *Two* area of each *4"* if fitted with easing gear *Yes* if steam from main boilers enter the donkey boiler *Yes* diameter of donkey boiler *6' 6"* length *11' 3"* description of riveting *Double single riv*  
 Thickness of shell plates *13/32"* diameter of rivet holes *7/8"* whether punched or drilled *Drilled* pitch of rivets *3 1/4"* lap of plating *6"*  
 per centage of strength of joint *65%* thickness of crown plates *1 1/16"* stayed by *Iron stays 1 3/4" dia + 1/2" stake*  
 Diameter of furnace, top *5' 1"* bottom *5' 10"* length of furnace *5' 8"* thickness of plates *8/16"* description of joint *Lap*  
 Thickness of furnace crown plates *9/16"* stayed by *As above* working pressure of shell by rules *49*  
 Working pressure of furnace by rules *As above* diameter of uptake *10"* thickness of plates *8/16" iron* thickness of water tubes *7/16" x 1"*

**SPARE GEAR.** State the articles supplied:— *2 Connecting rod bolts for top + bottom ends. 2 main bolts. 1 set Coupling bolts. 1 Lead + bridge pump valve also 1 set India rubber valves. Assortment of bolts, nuts, iron boiler + Condenser tubes. 2 Propeller blades. Safety valve springs 1 set of Metallic valves for both. Air + Circulating pumps*  
 The foregoing is a correct description,  
*A. C. Stephenson* Manufacturer.

**General Remarks** (State quality of workmanship, opinions as to class, &c. *These Engines and Boilers are of good workmanship + materials and are now in order and safe working condition + eligible to be noted in the Register's Book* *Lloyds M.C. 10/84*)

*It is submitted that this vessel is eligible to have the notification + L.M.C. 10.87 recorded*

*27*  
*9/11/84*

*(Large blue scribbles)*

The amount of Entry Fee .. £ *2* : - : - received by me,  
 Special .. £ *25* : *10* : -  
 Donkey Boiler Fee .. £ - : - : -  
 Certificate (if required) .. £ - : - : - *31/10/84*  
 To be sent as per margin.  
 (Travelling Expenses, if any, £ - *4/6*)

*(Signature)*

*James Morrison*  
 Engineer Surveyor to Lloyd's Register of British & Foreign Ships

*Clyde District*

Committee's Minute **FRIDAY 4 NOV 1887**

*(Signature)*