

# REPORT ON MACHINERY.

No. 10442 Port of Glasgow Received at London Office FRI 30 JAN 91  
 No. in Survey held at \_\_\_\_\_ Date, first Survey 8<sup>th</sup> Jan Last Survey 8<sup>th</sup> Jan 1891  
 Reg. Book. \_\_\_\_\_ (Number of Visits 1)  
147 on the S.S. Renfrewshire Tons  $\left\{ \begin{array}{l} \text{Gross} \quad 818 \\ \text{Net} \quad 506 \end{array} \right.$   
 Master Hadden Built at P. Glasgow By whom built Blackwood & Gordon When built 1870  
 Engines made at P. Glasgow By whom made Blackwood & Gordon when made 1870  
 Boilers made at ✓ By whom made ✓ when made 1882  
 Registered Horse Power 96 Owners P. McMillan & Co Port belonging to Glasgow

## ENGINES, &c.—

Description of Engines				No. of Cylinders	
Diam. of Cylinders	Length of Stroke	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		

104 HR Gls

**DONKEY BOILER**— Description *Vertical with cross tubes*  
 Made at *Stockton* by whom made *Riley Bros* when made *6-12-90* where fixed *Glasgow*  
 Working pressure *60 lbs* tested by hydraulic pressure to *120 lbs* No. of Certificate *164* fire grate area *21 1/2 sq ft* description of safety valves *direct spring* No. of safety valves *one* area of each *1 1/2 sq ft* if fitted with easing gear *yes* if steam from main boilers can enter the donkey boiler *No* diameter of donkey boiler *6' 0"* length *12' 0"* description of riveting *Vertical lap double*  
 Thickness of shell plates *3/8"* diameter of rivet holes *1 3/16"* whether punched or drilled *punched* pitch of rivets *2 1/2"* lap of plating *4 1/2"*  
 per centage of strength of joint *71* thickness of crown plates *7/16"* stayed by *6 stays 1 1/2" effct. diam.*  
 Diameter of furnace, top *4' 10"* bottom *5' 5"* length of furnace *5' 9"* thickness of plates *1/2"* description of joint *Lap, single*  
 Thickness of furnace crown plates *7/16"* stayed by *same as crown* working pressure of shell by rules *74 lbs*  
 Working pressure of furnace by rules *63 lbs* diameter of uptake *15"* thickness of plates *7/16"* thickness of water tubes *3/8"*

**SPARE GEAR.** State the articles supplied:— *The above particulars were received from the Surveyors at 'Middlebro'*

The foregoing is a correct description,  
 Manufacturer.

*R. J. Boyd's Register*  
 Surveyor to Lloyd's Register  
 Glasgow