

# Report of Survey for Repairs of Engines and Boilers.

No. 33

No. in Reg. Book. Survey held at Sunderland. Date, first Survey July 4<sup>th</sup> Last Survey Oct<sup>r</sup> 13<sup>th</sup> 1876.

453 on the Steam Ship "Frankland." 541 Tons

Owners A. J. Morton. Port belonging to Sunderland. Years assigned. Character in Register Book. 90A1

Diameter of Cylinder 26 x 48. Engines made at Sunderland. When made 1869  
Length of Stroke 30.  
Pressure of Steam 70 lbs  
Nominal Horse Power 90 By whom made The North Eastern Marine Engineering Co<sup>y</sup>.

Particulars of Repairs and Examination The Engines were compounded by removing the old cylinders, and fitting high and low pressure cylinders, with pistons and valves complete; New exhaust columns, and altering the slide valve gearing to suit. All the tubes

were taken out of the surface condenser, cleaned and again replaced.

All the pumps overhauled. Crank shaft examined and fitted

new eccentric pullays on it. The propeller shaft drawn and new

lignum vitae fitted in the stern tube. A new propeller fitted.

Two new main boilers fitted with mountings complete. A new

Donkey boiler fitted with mountings complete. The bilge suction

valve of the ballast donkey pump, and the bilge injection valve, were

made non return valves, so as to prevent sea water being let into

the ship by mistake.

I was present when the steam was raised, Oct<sup>r</sup> 12<sup>th</sup>. The spring safety

valves adjusted to 70 lbs, and the engines worked. Steam 68 lbs vacuum 2 1/2

revol. 64. All worked very satisfactory, and no priming.

*(This section is crossed out with a large diagonal line.)*

The Amount of Fee ... £ 4 : 10 : received by me, HW  
Certificate (if required) ... £ 0 : 0 : 19<sup>th</sup> October 1876  
(Travelling Expenses, if any, £ 4 : 10)

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