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14148 For

## LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## Certificate for Vessels Navigated by Steam.

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*Overhauling* 18<sup>th</sup> Day of *November* 1870  
 We *John Scott & Sons* certify that the whole of the Boilers and Machinery of the  
 Steam Vessel *'Ella'* belonging to *Leith* whereof  
*Andrew Nicoll* is Master, *692* Tons, have been carefully inspected and  
 examined by *us* at *Overhauling*, and *we* find the same to be at  
 this time in good order and safe working condition.

Witness *our* handsSigned *John Scott & Sons* Manufacturing Engineers

The following is a true Account of the Particulars of the Machinery of the Steam Vessel above named:

## ENGINES.

N°.	<i>Two</i>
Diameter of Cylinder	<i>20 &amp; 36"</i>
Length of stroke	<i>24"</i>
N° per minute	<i>45</i>
Estimated Power	<i>65 H.P. Nom.</i>
Diameter of Paddle-wheels	<i>✓</i>
Length of Paddles	<i>✓</i>
Breadth of Paddles	<i>✓</i>
N° of Paddles	<i>✓</i>
On what motion	<i>✓</i>
N° of revolutions per minute	<i>✓</i>
Size of the holding down bolts	<i>2"</i>
Condition of d°.	<i>new</i>
Maker of the Engines	<i>John Scott &amp; Sons</i>
Age of the Engines	<i>new</i>
When were they last taken out	<i>✓</i>
Present condition of the Engines	<i>new</i>
Can injection water be taken from the bilge in the event of a serious leak	<i>yes</i>

## BOILERS.

Whether iron or copper	<i>Iron</i>
Working pressure	<i>40 lbs</i>
Can it be increased without going into the boiler	<i>Locked</i>
What are the means of changing the water while the boilers are at work	<i>Safety valve</i>
Maker of the Boilers	<i>Blow off</i>
Age of the Boilers	<i>John Scott &amp; Sons</i>
When were they last taken out	<i>new</i>
Present condition	<i>✓</i>
N° of feed pumps	<i>2</i>
How attached	<i>To engines</i>
	<i>One Donkey for feed</i>
	<i>One Hand L.</i>
What clear space upon the topside of the boiler from wood work	<i>All Iron</i>
D° at the end from d°	<i>6'</i>
D° round the chimney from d°	<i>All Iron</i>

## FUEL.

Where stowed	<i>Bunkers</i>
If in contact with boiler	<i>no</i>
If not, what space between coal boxes and boiler	<i>6"</i>
For what quantity is room provided	<i>75 tons</i>
If liable to get wetted	<i>no</i>

## PUMPS.

N° of hand pumps	<i>3</i>
Can they be worked by the engine	<i>no</i>
If any attached to engine their purpose and size	<i>Donkey</i>
N° of force pumps	<i>✓</i>
N° of branches, and hose of sufficient length to reach to every part of the vessel	<i>✓</i>

Signed *John Scott & Sons* Manufacturing EngineersLloyd's Register  
Foundation

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