

Copy

14148 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

Certificate for Vessels Navigated by Steam.

Re 571175

Sunderbitching 18th 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~~743~~ Tons, have been carefully inspected and examined by us at *Sunderbitching*, and we find the same to be at this time in good order and safe working condition.

Witness ~~my~~ ^{our} hands

Signed John Scott & Sons Manufacturing Engineers

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

ENGINES.		BOILERS.	
N ^o	<i>Two</i>	Whether iron or copper	<i>Iron</i>
Diameter of Cylinder	<i>20 & 36"</i>	Working pressure	<i>40 lbs</i>
Length of stroke	<i>24"</i>	Can it be increased without going into the boiler	<i>Locked</i>
N ^o . per minute	<i>45</i>	What are the means of changing the water while the boilers are at work	<i>Safety valve</i>
Estimated Power	<i>65 H.P. Nom^l</i>	Maker of the Boilers	<i>Blow off</i>
Diameter of Paddle-wheels	<i>✓</i>	Age of the Boilers	<i>John Scott & Sons</i>
Length of Paddles	<i>✓</i>	When were they last taken out	<i>new</i>
Breadth of Paddles	<i>✓</i>	Present condition	
N ^o . of Paddles	<i>✓</i>		
On what motion	<i>✓</i>	N ^o . of feed pumps	<i>2</i>
N ^o . of revolutions per minute	<i>✓</i>	How attached	<i>To engines</i>
Size of the holding down bolts	<i>2"</i>	<i>One Donkey for feed</i>	
Condition of d ^o	<i>new</i>	<i>One Hand L^o</i>	
Maker of the Engines	<i>John Scott & Sons</i>	What clear space upon the topside of the boiler from wood work	<i>All Iron</i>
Age of the Engines	<i>new</i>	D ^o . at the end from d ^o	<i>6'</i>
When were they last taken out	<i>new</i>	D ^o . round the chimney from d ^o	<i>All Iron</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>	PUMPS.	
		N ^o . 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 ^o . of force pumps	
		N ^o . of branches, and hose of sufficient length to reach to every part of the vessel	

FUEL.

Where stowed *Bunkers*

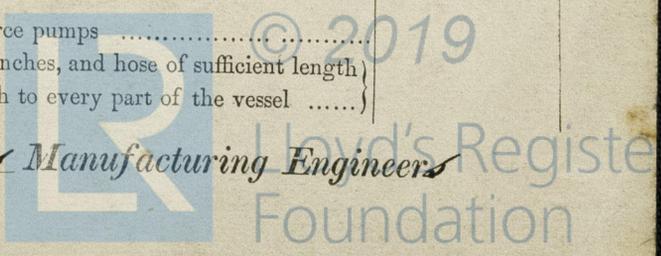
If in contact with boiler *no*

If not, what space between coal boxes and boiler *6"*

For what quantity is room provided *45 tons*

If liable to get wetted *no*

Signed John Scott & Sons Manufacturing Engineers



IRON 460-0439