

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## Certificate for Vessels Navigated by Steam.

28<sup>th</sup> Day of May 18 70  
We hereby certify that the whole of the Boilers and Machinery of the  
 Steam Vessel James Hall belonging to Aberdeen whereof  
Andrew Sinkgate is Master, 221.12 Tons, have been carefully inspected and  
 examined by us at Aberdeen, and we find the same to be at  
 this time in good order and safe working condition.

Witness my hand,

Hall Russell & Co Manufacturing Engineer.  
per W. H. Wilson

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

ENGINES.		BOILERS.	
N <sup>o</sup> .....	<u>2</u>	Whether iron or copper .....	<u>Iron</u>
Diameter of Cylinder .....	<u>23 1/2" + 42"</u>	Working pressure .....	<u>60 lbs</u>
Length of stroke .....	<u>20"</u>	Can it be increased without going into the boiler .....	<u>no</u>
N <sup>o</sup> . per minute .....	<u>65</u>	What are the means of changing the water while the boilers are at work .....	<u>The usual means</u>
Estimated Power .....	<u>65 H.P.</u>	Maker of the Boilers .....	<u>Hall Russell &amp; Co</u>
Diameter of Paddle-wheels .....	<u>Screws</u>	Age of the Boilers .....	<u>new</u>
Length of Paddles .....		When were they last taken out .....	
Breadth of Paddles .....		Present condition .....	
N <sup>o</sup> . of Paddles .....			
On what motion .....			
N <sup>o</sup> . of revolutions per minute .....	<u>"</u>		
Size of the holding down bolts .....	<u>1 1/4</u>		
Condition of d <sup>o</sup> . .....	<u>good</u>		
Maker of the Engines .....	<u>Hall Russell &amp; Co</u>	N <sup>o</sup> . of feed pumps .....	<u>one</u>
Age of the Engines .....	<u>new</u>	How attached .....	<u>The usual way</u>
When were they last taken out .....			
Present condition of the Engines .....	<u>good</u>		
Can injection water be taken from the bilge in the event of a serious leak .....	<u>yes</u>		
		What clear space upon the topside of the boiler from wood work .....	<u>No wood work on top of boiler or round chimney</u>
		D <sup>o</sup> . at the end from d <sup>o</sup> . .....	<u>yes</u>
		D <sup>o</sup> . round the chimney from d <sup>o</sup> . .....	
FUEL.		PUMPS.	
Where stowed .....	<u>Along side of Engines &amp; Boiler</u>	N <sup>o</sup> . of hand pumps .....	<u>3</u>
If in contact with boiler .....	<u>No</u>	Can they be worked by the engine .....	<u>one can feed Bilge</u>
If not, what space between coal boxes and boiler .....	<u>Ample</u>	If any attached to engine their purpose and size .....	<u>Air &amp; circulating pumps</u>
For what quantity is room provided .....	<u>50 tons</u>		
If liable to get wetted .....	<u>No</u>		
		N <sup>o</sup> . of force pumps .....	<u>one</u>
		N <sup>o</sup> . of branches, and hose of sufficient length to reach to every part of the vessel .....	<u>yes</u>

Hall Russell & Co Manufacturing Engineers