

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

## ENGINEER'S CERTIFICATE.

The following is a true Account of the Particulars of the Machinery and Boilers:—

ENGINES.—Here state description of Engines, whether Direct Acting or Geared, Inverted, Horizontal, Diagonal, or Oscillating Cylinders  
No. of Cylinders, &c.

The engines are inverted direct-acting compound with surface condenser, one high & one low pressure cylinder.

ENGINES, maker of <i>Palmer's Shipbuilding &amp; Iron Co. Ltd.</i>	Bilge Pumps, No. ( <i>2</i> ) and size <i>4</i> in <i>16</i> stroke
„ age of <i>new</i>	Feed „ No. ( <i>2</i> ) and size <i>4</i> in <i>16</i> in
„ last time taken out <i>new</i>	Spare gear, if usual quantity on board Vessel <i>yes</i>
„ present condition <i>new</i>	Fuel, where stowed <i>In side &amp; cross bunkers</i>
Diameter of Cylinder <i>30 &amp; 60</i>	„ space between Coal Bunkers and Boilers <i>12</i>
Length of stroke <i>33</i>	„ for what quantity is space provided <i>220 tons</i>
No. per minute of Engines <i>70</i>	Donkey Engine and Boiler <i>yes</i>
„ of Screw <i>70</i>	„ if fitted in Engine Room or on Deck <i>Donkey in Engine Room Boiler in donkey in Engine Room</i>
Estimated power <i>140</i>	„ can pump be worked by hand <i>yes</i>
Effective power <i>700</i>	„ size of pump ( <i>4</i> ) and stroke <i>8</i>
Diameter of Screw (or <i>Blade</i> <i>15.0</i> )	„ is hose of sufficient length to reach every part of the Vessel <i>yes</i>
Pitch of Screw <i>15.0 increasing to 15.6</i>	No. ( ) and continuation of hand pumps, if fitted in Engine Room <i>none</i>
No. of Blades (or <i>Plates</i> <i>4</i> )	
Description of Screw (or <i>Plates</i> ) <i>movable steel blades</i>	
Holding down Bolts, size <i>2 1/2</i> in	
„ present condition <i>new</i>	

BOILER.—Here state description of Boiler, and No.; if Tubular, or Flues; No. of Furnaces; if fitted with superheating apparatus; if Fired athwartships, or from fore, or after end of Boiler, &c.

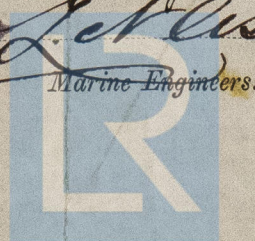
Two cylindrical tubular Boilers with four circular furnaces dry uptake and an annular vertical superheater round base of Funnel. The boilers are fired from forward.

BOILER, maker of <i>Palmer's Shipbuilding &amp; Iron Co. Ltd.</i>	Can each Boiler be used separately <i>yes</i>
„ age of <i>new</i>	What clear space between top of Boiler and woodwork <i>10.0</i>
„ when last taken out <i>new</i>	What clear space between Funnel and woodwork <i>2.3</i>
„ present condition <i>new</i>	Are Engine and Boiler Keelsons well connected fore and aft <i>yes</i>
„ working pressure <i>75 lbs per sq in</i>	
No. of surface Blow off Cocks to each Boiler <i>one</i>	
SCREW SHAFT length <i>111.8</i> diameter <i>9 1/2</i> Tunnel thickness of plating <i>5/16 x 3/8</i> height <i>4.1 &amp; 5.3</i>	
width <i>3.7</i> if water-tight door on Engine Bulkhead <i>no, the tunnel is watertight</i>	

Port *Newcastle on Tyne*, 29<sup>th</sup> day of *July* 1874.

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *"Royal Crown"* belonging to *London* whereof *Reed* is Master, *1176.94* Tons Register, and *140* H.P. have been carefully inspected and examined by us at *Larson on Tyne* and we found the same, at this date, in good order and safe working condition.

*Palmer's Shipbuilding & Iron Co. Ltd.*  
*Thos. L. Clark*  
Marine Engineers.



Lloyd's Register  
Foundation