

# 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.

*Two Cylinders, Compound Direct Acting, Inverted Surface Condensing.*

ENGINES, maker of	<i>Caird &amp; Co</i>	Bilge Pumps, No. ( <i>Two</i> ) and size	<i>3 ins. diam 2 1/2 ins</i>
„ age of	<i>New</i>	Feed „ No. ( <i>Two</i> ) and size	<i>3 ins „ 2 1/2 ins</i>
„ last time taken out	—	Spare gear, if usual quantity on board Vessel	<i>Yes</i>
„ present condition	—	Fuel, where stowed	<i>alongside Boiler</i>
Diameter of Cylinder	<i>22" 44"</i>	„ space between Coal Bunkers and Boilers	<i>18 ins</i>
Length of stroke	<i>27" 85"</i>	„ for what quantity is space provided	<i>80 Tons</i>
No. per minute of Engines	<i>85</i>	Donkey Engine and Boiler	—
„ of Screw	—	„ if fitted in Engine Room or on Deck	<i>in Engine room</i>
Estimated power	<i>85</i>	„ can pump be worked by hand	<i>No</i>
Effective power	<i>400</i>	„ size of pump ( <i>3</i> ) and stroke	<i>6 inches</i>
Diameter of Screw (or Paddle Wheels)	<i>8 ft bins</i>	„ is hose of sufficient length to reach every part of the Vessel	<i>Yes</i>
Pitch of Screw	<i>13 ft to 14 ft</i>	No. ( ) and continuation of hand pumps, if fitted in Engine Room	<i>None</i>
No. of Blades (or Floats)	<i>four</i>		
Description of Screw (or Floats)	<i>ordinary</i>		
Holding down Bolts, size	<i>1 in</i>		
„ present condition	—		

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.

*One oval multitubular Boiler with two furnaces, fired from after end. no superheater*

BOILER, maker of	<i>Caird &amp; Co</i>	Can each Boiler be used separately	—
„ age of	<i>New</i>	What clear space between top of Boiler and woodwork	—
„ when last taken out	—	What clear space between Funnel and woodwork	—
„ present condition	—	Are Engine and Boiler Keelsons well connected fore and aft	<i>Yes</i>
„ working pressure	<i>65</i>		
No. of surface Blow off Cocks to each Boiler	<i>one on Ships side &amp; one on Boiler</i>		
SCREW SHAFT length	<i>18 ft 4 ins diameter 1 1/2 in</i>	Tunnel, thickness of plating	<i>1/4 in</i>
width	<i>3 ft 2 ins</i>	height	<i>4 ft</i>
	<i>if water-tight door on Engine Bulkhead.</i>		<i>Yes</i>

Port *Glasgow* 19 day of *April* 18 *75*

*We* hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Karang* belonging to *The Netherlands India Str. Co.* whereof *Kittel* is Master, *221 3/4* Tons Register, and *85* H.P. have been carefully inspected and examined by *us* at *Glasgow* and *we* found the same, at this date, in good order and safe working condition.

