

Iron 9579

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:—

*Vessel building by M<sup>r</sup> J. R. Thompson*

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

*Compound, direct acting inverted cylinders*

ENGINES, maker of *Geo Black*  
 „ age of *new* *Lundland*  
 „ last time taken out \_\_\_\_\_  
 „ present condition \_\_\_\_\_  
 Diameter of Cylinder *1. 27 + 50 in -*  
 Length of stroke *30 in*  
 No. per minute of Engines *abt 65*  
 „ of Screw \_\_\_\_\_  
 Estimated power *98*  
 Effective power *abt 400*  
 Diameter of Screw (or Paddle Wheels) *12.6 dia*  
 Pitch of Screw *15.6*  
 No. of Blades (or Floats) *4*  
 Description of Screw (or Floats) *Ordinary*  
 Holding down Bolts, size *1 1/2 + 1 1/4 in*  
 „ present condition \_\_\_\_\_

Bilge Pumps, No. ( *2* ) and size *4 1/4*  
 Feed „ No. ( *2* ) and size *4 1/4*  
 Spare gear, if usual quantity on board Vessel } *Yes*  
 Fuel, where stowed *In Bunkers*  
 „ space between Coal Bunkers and Boilers } *12 in*  
 „ for what quantity is space provided *180 Tons*  
 Donkey Engine and Boiler *Yes*  
 „ if fitted in Engine Room or on Deck } *Engine room*  
 „ can pump be worked by hand *separate hand pump*  
 „ size of pump ( *6* ) and stroke *8*  
 „ is hose of sufficient length to reach every part of the Vessel } *Yes*  
 No. ( ) and continuation of hand pumps, if fitted in Engine Room \_\_\_\_\_

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 force, or after end of Boiler, &c.

*2 Multi tubular - 2 Furnaces in each, no superheating  
Fuel from fore end*

BOILER, maker of *Geo Black*  
 „ age of *new*  
 „ when last taken out \_\_\_\_\_  
 „ present condition \_\_\_\_\_  
 „ working pressure *65 lbs*  
 No. of surface Blow off Cocks to each Boiler } *one in fore  
one in bottom*

Can each Boiler be used separately *Yes*  
 What clear space between top of Boiler and woodwork } *2 feet*  
 What clear space between Funnel and woodwork } *3 feet*  
 Are Engine and Boiler Keelsons well connected fore and aft } *Yes*

SCREW SHAFT length *89.6* diameter *8 1/2 to 7 1/4* Tunnel, thickness of plating *3/16* height *4 feet 6 in*  
 width *3.9* if water-tight door on Engine Bulkhead. *Yes*

Port *Lundland* day of *December* 18 *78*

*I* hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *"Celous"* belonging to *J. M. Ballin & Co* whereof *Geo. Waig* is Master, *655* Tons Register, and *98* H.P. have been carefully inspected and examined by *me* at *Lundland* and *I* found the same, at this date, in good order and safe working condition.

*Geo Black*  
 Engineer  
 Lloyd's Register  
 Marine Engineers.  
 Foundation