

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.

*Direct acting, Horizontal, Compound, with
Surface Condensers.*

ENGINES, maker of *John Key*
 „ age of *Five years*
 „ last time taken out *1874*
 „ present condition *New Cylinders, Ford*
 Diameter of Cylinder *46 80 ins*
 Length of stroke *38 ins*
 No. per minute of Engines *60*
 „ of Screw *60*
 Estimated power *400*
 Effective power *1500*
 Diameter of Screw (or Paddle Wheels) *17 1/4*
 Pitch of Screw *22 1/2*
 No. of Blades (or Floats) *4*
 Description of Screw (or Floats) *Griffiths*
 Holding down Bolts, size *1 3/4*
 „ present condition *New*

Bilge Pumps, No. (*2*) and size *4 1/2" dia 38" Stroke*
 Feed „ No. (*2*) and size *4 1/2" " "*
 Spare gear, if usual quantity on board Vessel *Yes*
 Fuel, where stowed *In Coal Bunkers*
 „ space between Coal Bunkers and Boilers *1' 2"*
 „ for what quantity is space provided *450 Tons*
 Donkey Engine and Boiler *Yes*
 „ if fitted in Engine Room or on Deck *Fore end of Stowehole*
 „ can pump be worked by hand *Yes*
 „ size of pump (*5 1/2"*) and stroke *11"*
 „ is hose of sufficient length to reach every part of the Vessel *Yes*
 No. (*one*) and continuation of hand pumps, if fitted in Engine Room *Double acting*

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

*Four Circular Boilers 12 feet diameter, Super heater
Three furnaces in each boiler, fired athwartships
Proved to 120 lbs
Working Pressure 60 lbs*

BOILER, maker of *John Key*
 „ age of *New*
 „ when last taken out
 „ present condition *Ford*
 „ working pressure *60 lbs*
 No. of surface Blow off Cocks to each Boiler *one*

Can each Boiler be used separately *Yes*
 What clear space between top of Boiler and woodwork *5' 6"*
 What clear space between Funnel and woodwork *2 feet*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *123 ft* diameter *1 1/4"* Tunnel thickness of plating *3/8"* height *6 feet*
 width *4' 8"* if water-tight door on Engine Bulkhead. *Yes*

Port *Reith* 19 day of *October* 187*4*

I hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood)
 Screw (or Paddle) Steam Vessel *Scotland* belonging to *Temperleys & Co*
 whereof *John James* is Master, *2645* Tons Register, and *400* H.P. have been
1694 carefully inspected and examined by me at *Reith* and I found the
 same, at this date, in good order and safe working condition.

John Key

Marine Engineers.

Lloyd's Register
Foundation

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