

11484 Lm

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.

*a pair of direct acting inverted Cylinder
Compound Engines with two Cylinders*

ENGINES, maker of *William King & Co*
 „ age of *new*
 „ last time taken out *—*
 „ present condition *good*
 Diameter of Cylinder *18 1/2" & 23"*
 Length of stroke *18"*
 No. per minute of Engines *90.*
 „ of Screw *90.*
 Estimated power *25 H.P.*
 Effective power *100 H.P.*
 Diameter of Screw (or ~~Paddle~~ *—*) *7' 0"*
 Pitch of Screw *18' 6"*
 No. of Blades (~~—~~) *three*
 Description of Screw (~~—~~) *Common*
 Holding down Bolts, size *1 1/8"*
 „ present condition *good new*

Bilge Pumps, No. (*1*) and size *3"*
 Feed „ No. (*1*) and size *3"*
 Spare gear, if usual quantity on } *yes*
 board Vessel }
 Fuel, where stowed *Bunkers*
 „ space between Coal Bunkers } *6" & 20"*
 and Boilers }
 „ for what quantity is space provided *20 tons*
 Donkey Engine and ~~Boiler~~ *yes*
 „ if fitted in Engine Room or } *Engine room*
 on Deck }
 „ can pump be worked by hand *yes deck pump*
 „ size of pump (*4"*) and stroke *9"*
 „ is hose of sufficient length to } *yes*
 reach every part of the Vessel }
 No. (*1*) and continuation of hand } *one in Engine room*
 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 fore, or after end of Boiler, &c.

*One Round horizontal tubular boiler with two
furnaces fired & having steam Chest*

BOILER, maker of *William King & Co*
 „ age of *new*
 „ when last taken out *—*
 „ present condition *good*
 „ working pressure *60 lb*
 No. of surface Blow off Cocks to } *one*
 each Boiler }

SCREW SHAFT length *20 ft* diameter *5"* Tunnel, thickness of plating *—* height *—*
 width *—* if water-tight door on Engine Bulkhead.

Can each Boiler be used separately *—*
 What clear space between top of } *all round*
 Boiler and woodwork }
 What clear space between Funnel } *do*
 and woodwork }
 Are Engine and Boiler Keelsons } *yes*
 well connected fore and aft }

Port *Glasgow* day of *12th June* 18*73*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood)
 Screw (~~—~~ *Paddle*) Steam Vessel *Granamera* belonging to *Callao*
 whereof *Jay* is Master, *27.84* Tons Register, and *25* 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.

William King & Co
Dock Engine & Boilermakers
 Marine Engineers.