

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.
Inverted direct acting compound screw engines, with one high pressure and one low pressure cylinder

ENGINES, maker of *R. Napier & Sons*
 „ age of *new*
 „ last time taken out *—*
 „ present condition *new*
 Diameter of Cylinder *53" x 94"*
 Length of stroke *4 feet*
 No. per minute of Engines *about 65*
 „ of Screw *65*
 Estimated power *400*
 Effective power *2100*
 Diameter of Screw (or Paddle Wheels) *16 feet*
 Pitch of Screw (mean *23 1/2 ft*) *varies from 22 to 25 ft*
 No. of Blades (or Floats) *4*
 Description of Screw (or Floats) *Griffiths*
 Holding down Bolts, size *1 1/2"*
 „ present condition *new*

Bilge Pumps, No. (*2*) and size *5" dia x 2 ft stroke*
 Feed „ No. (*2*) and size *5" x 2"*
 Spare gear, if usual quantity on board Vessel *Yes*
 Fuel, where stowed *Forward aft. & alongside Boilers*
 „ space between Coal Bunkers and Boilers *5 inches at nearest point*
 „ for what quantity is space provided *406 tons.*
 Donkey Engine and Boiler *Yes*
 „ if fitted in Engine Room or on Deck *Donkey Engine in Engine Room*
 „ can pump be worked by hand *Boiler on Deck - No*
 „ size of pump (*4 1/2*) and stroke *10"*
 „ is hose of sufficient length to reach every part of the Vessel *Yes*
 No. (*1*) and continuation of hand pumps, if fitted in Engine Room *Hand pump fitted in Engine Room to pump on deck overboard, & into Boiler*

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 five furnaces in each. Fired fore & aft from both ends of Boilers, one vertical flue superheater fitted

BOILER, maker of *R. Napier & Sons*
 „ age of *new*
 „ when last taken out *—*
 „ present condition *new*
 „ working pressure *65 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 *52 inches*
 What clear space between Funnel and woodwork *27 inches*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *24.6 1/4* diameter *15 1/4* Tunnel, thickness of plating *5/16"* height *4' 6"*
 width *5' 0"* if water-tight door on Engine Bulkhead. *Yes*

Port *Glasgow*, *28th* day of *August* 18 *74*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Amazona* belonging to _____ as Master, _____ Tons Register, and *400* 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.

R. Napier & Sons

 Lloyd's Register
 Marine Engineers.

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