

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 *Caird & Co*
 „ age of *new*
 „ last time taken out *—*
 „ present condition *—*
 Diameter of Cylinder *22" 44"*
 Length of stroke *24"*
 No. per minute of Engines *85*
 „ of Screw *—*
 Estimated power *85*
 Effective power *400*
 Diameter of Screw (or Paddle Wheels) *8 ft 6 ins*
 Pitch of Screw *13 ft to 14 ft*
 No. of Blades (or Floats) *four*
 Description of Screw (or Floats) *ordinary*
 Holding down Bolts, size *1 in*
 „ present condition *—*

Bilge Pumps, No. (*two*) and size *3 in. dia 7 ins*
 Feed „ No. (*two*) and size *3 ins 7 ins*
 Spare gear, if usual quantity on board Vessel *yes*
 Fuel, where stowed *alongside Boiler*
 „ space between Coal Bunkers and Boilers *18 ins*
 „ for what quantity is space provided *80 tons*
 Donkey Engine and Boiler *—*
 „ if fitted in Engine Room or on Deck *in Engine room*
 „ can pump be worked by hand *No*
 „ size of pump (*3*) and stroke *6 inches*
 „ is hose of sufficient length to reach every part of the Vessel *yes*
 No. () and continuation of hand pumps, if fitted in Engine Room *None*

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 *Caird & Co*
 „ age of *new*
 „ when last taken out *—*
 „ present condition *—*
 „ working pressure *65*
 No. of surface Blow off Cocks to each Boiler *one on Ships side & one on Boiler*

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

SCREW SHAFT length *18 ft 4 ins* diameter *7 1/2 in* Tunnel, thickness of plating *7/4 in* height *4 ft*
 width *3 ft 2 ins* if water-tight door on Engine Bulkhead *yes*

Port *Glasgow* 19 day of *April* 18 *95*

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 S.S. 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.

Caird & Co
 Lloyd's Register
 Marine Engineers.