

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.

One pair of Compound, Surface Condensing, Direct acting Engines.

11216 Iron

ENGINES, maker of *Hall Russell & Co*
 „ age of *new*
 „ last time taken out
 „ present condition *good*
 Diameter of Cylinder *39" and 40"*
 Length of stroke *3 feet*
 I. b. per minute of Engines *65*
 „ of Screw *65*
 Estimated power *200 H.P.*
 Effective power *1000*
 Diameter of Screw (or Paddle Wheels) *14" 5"*
 Pitch of Screw *22 feet*
 No. of Blades (or Floats) *4*
 Description of Screw (or Floats) *Common*
 Lifting down Bolts, size *Ample*
 present condition *Good*

Bilge Pumps, No. (2) and size *5"*
 Feed „ No. (2) and size *4 1/4"*
 Spare gear, if usual quantity on board Vessel *usual quantity*
 Fuel, where stowed *In bunkers*
 „ space between Coal Bunkers and Boilers *Ample*
 „ for what quantity is space provided *200 tons*
 Donkey Engine and Boiler *Yes*
 „ if fitted in Engine Room or on Deck *Engine Room*
 „ can pump be worked by hand *Yes*
 „ size of pump (6") and stroke *10"*
 „ is hose of sufficient length to reach every part of the Vessel *Yes*
 No. () and continuation of hand pumps, if fitted in Engine Room *one*

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.

2 Cylindrical Tubular boilers fired at fore and after ends 4 furnaces in each boiler —

BOILER, maker of *Hall Russell & Co*
 „ age of *new*
 when last taken out
 present condition *Good*
 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 *No wood work over boilers*
 What clear space between Funnel and woodwork *Ample*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

Shaft length *about 40 feet* diameter *11"* Tunnel, thickness of plating *3/16" & 1/4"* height *4' 6"*
 width *3' 3"* if water-tight door on Engine Bulkhead *Yes*

Port *Aberdeen* ⁴/_{th} day of *April* 18 *73*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) *new (or Paddle)* Steam Vessel *Douglas* belonging to *Aberdeen* whereof *is* Master, *864* Tons Register, and *200 H.P.* have been carefully inspected and examined by *us* at *Aberdeen* and *we* found the same, at this date, in good order and safe working condition.

Hall Russell & Co
 Lloyd's Register
 Marine Engineers.