

10146 Iron

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 Surface Condensing
Screw Engines 2 Cylinders*

ENGINES, maker of *P. & A. Hawthorn*
 „ age of *New April 1872*
 „ last time taken out *New*
 „ present condition *New*
 Diameter of Cylinder *High Press 29 Low Press 50*
 Length of stroke *36*
 No. per minute of Engines *60*
 „ of Screw *60*
 Estimated power *140*
 Effective power *700*
 Diameter of Screw (or Paddle Wheels) *15 ft*
 Pitch of Screw *14 to 18 ft*
 No. of Blades (or Floats) *4*
 Description of Screw (or Floats) *Right hand screw and float blades*
 Holding down Bolts, size *3 dia*
 „ present condition *New*

Bilge Pumps, No. (*2*) and size *5 dia x 15 Stroke*
 Feed „ No. (*2*) and size *4 1/2 x 18 do*
 Spare gear, if usual quantity on board Vessel *Yes*
 Fuel, where stowed *Bunkers Sides of Engines & Boiler*
 „ space between Coal Bunkers and Boilers *10*
 „ for what quantity is space provided *250 Tons*
 Donkey Engine and Boiler *1 Water Ballast 1 Fed donkey*
 „ if fitted in Engine Room or on Deck *Donkeys in Eng. Room*
 „ can pump be worked by hand *Yes*
 „ size of pump *8 1/2 dia 4 Fed* and stroke *11 1/2 Water Ballast*
 „ 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.

*3 Cylindrical Multitubular Boilers 2 furnaces in each fitted with
Superheating Apparatus fired from fore end of Boilers*

BOILER, maker of *P. & A. Hawthorn*
 „ age of *New April 1872*
 „ when last taken out *Never*
 „ present condition *New*
 „ working pressure *35 lbs*
 No. of surface Blow off Cocks to each Boiler *1*

Can each Boiler be used separately *Yes*
 What clear space between top of Boiler and woodwork *5 ft*
 What clear space between Funnel and woodwork *4-3*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *98.6* diameter *9 1/2* Tunnel, thickness of plating *1/4* height *5.6*
 width *3.9* if water-tight door on Engine Bulkhead. *Yes*

Port *Newcastle* day of *May* 18 *72*

M hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Earl of Dundee* belonging to *Newcastle* whereof *J. P. Wright* is Master, *989.29* Tons Register, and *140* H.P. have been carefully inspected and examined by *North Shields* and *41* found the same, at this date, in good order and safe working condition.

P. & A. Hawthorn
 (Marine Engineers.)