

11571 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.

Compound. Inverted Vertical Acting Surface Condensing Screw Engines.

ENGINES, maker of *Rait & Lindsay*
 „ age of *New*
 „ last time taken out
 „ present condition *Good*
 Diameter of Cylinder *29" and 52"*
 Length of stroke *3' 0"*
 No. per minute of Engines *76*
 „ of Screw *18"*
 Estimated power *N.P. = 120*
 Effective power *514*
 Diameter of Screw (~~or Paddle Wheels~~) *13' ft*
 Pitch of Screw *15" 6"*
 No. of Blades (~~or Floats~~) *4*
 Description of Screw (~~or Floats~~) *Common*
 Holding down Bolts, size *1 1/4"*
 „ present condition *Good*

Bilge Pumps, No. (*2*) and size *4 1/2" dia*
 Feed „ No. (*2*) and size *4 1/2" dia*
 Spare gear, if usual quantity on board Vessel } *yes*
 Fuel, where stowed *Forward fore and aft.*
 „ space between Coal Bunkers and Boilers } *7' 0"*
 „ for what quantity is space provided
 Donkey Engine and Boiler *yes*
 „ if fitted in Engine Room or on Deck } *Stoke hold*
 „ can pump be worked by hand *yes*
 „ size of pump (*4*) and stroke *12"*
 „ is hose of sufficient length to reach every part of the Vessel } *yes*
 No. () and continuation of hand 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 force, or after end of Boiler, &c.

Two tubular boilers. four furnaces fore and aft.

BOILER, maker of *Rait & Lindsay*
 „ age of *New*
 „ when last taken out
 „ present condition *Good*
 „ working pressure *50 lbs*
 No. of surface Blow off Cocks to each Boiler } *one*
 SCREW SHAFT length *20' 9"* diameter *11" radius* Tunnel, thickness of plating *5/16"* height
 width if water-tight door on Engine Bulkhead.

Can each Boiler be used separately *yes*
 What clear space between top of Boiler and woodwork } *18" radius*
 What clear space between Funnel and woodwork } *2' ft*
 Are Engine and Boiler Keelsons well connected fore and aft } *yes*

Port *Glasgow* *22nd* day of *June* 18 *73*

We hereby certify, that the whole of the above Machinery and Boilers, of the Iron (or Wood) Screw (~~or Paddle~~) Steam Vessel *Kinghorn* belonging to *Leith* whereof *Craig* is Master, *575* Tons Register, and *120* H.P. have been carefully inspected and examined by us at *Glasgow Harbour* and we found the same, at this date, in good order and safe working condition.

Rait Lindsay
Cranstonhill Foundry Glasgow
 Marine Engineers.