

Report No. 3291 In 12623

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 Engines with direct acting inverted cylinders one High & one Low pressure

ENGINES, maker of *Blair & Co Ltd*
 „ age of *new*
 „ last time taken out _____
 „ present condition _____
 Diameter of Cylinder *25 1/2" & 5 1/2"*
 Length of stroke *33"*
 No. per minute of Engines *about 65*
 „ of Screw _____
 Estimated power *99 HP*
 Effective power *about 400 HP*
 Diameter of Screw (or Paddle Wheels) *12' 6"*
 Pitch of Screw *about 14 ft*
 No. of Blades (or Floats) *4*
 Description of Screw (or Floats) _____
 Holding down Bolts, size *2 1/2" diam*
 „ present condition *new*

Bilge Pumps, No. (*2*) and size *3 3/4" diam*
 Feed „ No. (*2*) and size *3 3/4" diam*
 Spare gear, if usual quantity on board Vessel } *yes*
 Fuel, where stowed *In Bunkers*
 „ space between Coal Bunkers and Boilers } *12"*
 „ for what quantity is space provided _____
 Donkey Engine and Boiler *Engine below*
 „ if fitted in Engine Room or on Deck } *Boiler on deck*
 „ can pump be worked by hand } *yes*
 size of pump (*7 1/2'*) and stroke *9" double acting*
 „ there is hose of sufficient length to reach every part of the Vessel } *deck*
 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.

One Tubular Boiler with four furnaces fired from forward

BOILER, maker of *Blair & Co Ltd*
 „ age of *new*
 „ when last taken out _____
 „ present condition _____
 „ working pressure *70 lbs*
 No. of surface Blow off Cocks to each Boiler } *1 Surface & 1 Bottom blow off cock*
 SCREW SHAFT length *19 ft* diameter *8 1/2"* Tunnel thickness of plating _____ height _____
 width _____ if water-tight door on Engine Bulkhead.

Can each Boiler be used separately _____
 What clear space between top of Boiler and woodwork } *3 ft*
 What clear space between Funnel and woodwork } *2 ft*
 Are Engine and Boiler Keelsons well connected fore and aft } *yes*

Port *Stockton* *11th* day of *April* 18*74*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Marmora* belonging to *Mr Richard Hartman* whereof *Shannon* is Master, *606* Tons Register, and *99* H.P. have been carefully inspected and examined by us at *Stockton on Tees* and we found the same, at this date, in good order and safe working condition.

pro Blair & Co Ltd
G W Blair

Marine Engineers.

Lloyd's Register
Foundation