

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.

Direct Acting Compound 2 Cylinders

ENGINES, maker of *Sunderland Engine Works*
 „ age of *New*
 „ last time taken out
 „ present condition *New*
 Diameter of Cylinder *H.P. 28 I.P. 54*
 Length of stroke *2'-6"*
 No. per minute of Engines *66 Revolutions*
 „ of Screw *66*
 Estimated power *120 N.H.P.*
 Effective power *440 I.H.P.*
 Diameter of Screw (or Paddle Wheels) *13'-8"*
 Pitch of Screw *15'-0"*
 No. of Blades (or Floats) *4*
 Description of Screw (or Floats) *Common Screw*
 Holding down Bolts, size *1 1/2" diameter*
 „ present condition *New*

Bilge Pumps, No. (*2*) and size *3 1/2" dia 2'-6" stroke*
 Feed „ No. (*2*) and size *3 1/2" - 2'-6"*
 Spare gear, if usual quantity on board Vessel
 Fuel, where stowed *Fore & Aft Bunkers in Engine & Boiler*
 „ space between Coal Bunkers and Boilers *1'-0" Space*
 „ for what quantity is space provided
 Donkey Engine and Boiler *one 6" water Ballast & one 1 1/2" boiler pump*
 „ if fitted in Engine Room or on Deck *boiler on deck, engine in engine room*
 „ can pump be worked by hand *Yes*
 „ size of pump (*4'*) and stroke *6"*
 „ is hose of sufficient length to reach every part of the Vessel
 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.

2 Tubular Boilers with 2 Furnaces each, fired from Forward end. No Super heater

BOILER, maker of *Sunderland Engine Works*
 „ age of *New*
 „ when last taken out
 „ present condition *New*
 „ working pressure *70 lbs per sq inch*
 No. of surface Blow off Cocks to each Boiler *1 surface 1 bottom*

Can each Boiler be used separately *Yes*
 What clear space between top of Boiler and woodwork *1'-0"*
 What clear space between Funnel and woodwork *5'-0"*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *101'-6"* diameter *9"* Tunnel. thickness of plating *1/4"* height *6'-0"*
 width *4'-0"* if water-tight door on Engine Bulkhead. *Yes.*

Port *Sunderland* *31st* day of *June* 18*74*

hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *No 201 S.S.* belonging to *James Laing* whereof *is* Master, *Tons* Register, and *120* H.P. have been carefully inspected and examined by *us* at *Sunderland* and *we* found the same, at this date, in good order and safe working condition.

For and on behalf of the North Eastern Marine Engineering Company.
 Limited.

Marine Engineers.

Walker & Scott
 Lloyd's Register Foundation