

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.

Geared, Compound, Twin Screw.

ENGINES, maker of *Martin Samuelson, Hull*
 „ age of *6 years*
 „ last time taken out *Part taken out lately*
 „ present condition *New Cylinders & Condenser*
 Diameter of Cylinder *High Press Cyl: 28" Low Press 30"*
 Length of stroke *2 feet*
 No. per minute of Engines *62 1/2*
 „ of Screw
 Estimated power *98 H.P.*
 Effective power *400*
 Diameter of Screw *6 feet*
 Pitch of Screw *10 feet*
 No. of Blades (or Floats) *4 blades on each*
 Description of Screw (or Floats) *cast in halves*
 Holding down Bolts, size *1 1/2" dia*
 „ 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 *Cross & Wing Bunkers*
 „ space between Coal Bunkers and Boilers *12"*
 „ for what quantity is space provided *40 Tons*
 Donkey Engine and Boiler *Yes*
 „ if Fitted in Engine Room or on Deck *Boiler on Deck Donkey in*
 „ can pump be worked by hand *Yes (Sulphur)*
 „ size of pump (*50*) and stroke *10"*
 „ is hose of sufficient length to reach every part of the Vessel *Yes*
 No. () and condition of hand pumps, if fitted in Engine Room

BOILERS.—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 Round Tubular 2 Furnaces in each No Superheater
Fired fore & aft Ship—

BOILERS, maker of *Martin Samuelson, Hull*
 „ age of *New*
 „ when last taken out
 „ present condition *New*
 „ working pressure *50 lbs per sq"*
 No. of surface Blow off Cocks to each Boiler *1*
 „ *about 40 ft*
 SCREW SHAFT length *black steel* diameter *6 1/4"* Tunnel, thickness of plating *1/4"* height *4 feet*
 width *3' 6"* if water-tight door on Engine Bulkhead *Yes*

Can each Boiler be used separately *Yes*
 What clear space between top of Boiler and woodwork *18"*
 What clear space between Funnel and woodwork *12"*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

Port *of Hull* 21 day of *May* 1870

I hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~) Steam Vessel *"Annie"* belonging to *Goole* whereof *is Master,* Tons Register, and *98 H.P.* have been carefully inspected and examined by *me* at *Hull* and I have found the same, at this date, in good order and safe working condition.

Martin Samuelson



Lloyd's Register
Engineers
Foundation