

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.

Engines. Compound & Surface condensing and of the inverted cylinder direct acting description

ENGINES, maker of *George Clark*  
 „ age of *New*  
 „ last time taken out  
 „ present condition  
 Diameter of Cylinder *36" & 68"*  
 Length of stroke *42"*  
 No. per minute of Engines *55*  
 „ of Screw *— 4 — 4 —*  
 Estimated power *200*  
 Effective power  
 Diameter of Screw (or Paddle Wheels) *14 ft*  
 Pitch of Screw *19" 6"*  
 No. of Blades (or Floats) *4*  
 Description of Screw (or Floats) *Expanding pitch*  
 Holding down Bolts, size *1 1/2"*  
 „ present condition

Bilge Pumps, No. ( *2* ) and size *5" dia*  
 Feed „ No. ( *2* ) and size *5" dia*  
 Spare gear, if usual quantity on board Vessel *Yes*  
 Fuel, where stowed *in bunkers*  
 „ space between Coal Bunkers and Boilers *8 1/2"*  
 „ for what quantity is space provided *352 tons in all*  
 Donkey Engine and Boiler  
 „ if fitted in Engine Room or on Deck *Donkey Engine in Engine Room*  
 „ can pump be worked by hand *no*  
 „ size of pump ( *4 1/2"* ) and stroke *6"*  
 „ is hose of sufficient length to reach every part of the Vessel *yes*  
 No. ( ) and continuation of hand pumps, if fitted in Engine Room *Hand pump 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 fore, or after end of Boiler, &c.

Two Boilers of the Multitubular description with two fires in Each fired from fore end

BOILER, maker of *George Clark*  
 „ age of *New*  
 „ when last taken out  
 „ present condition  
 „ working pressure *70 lbs*  
 No. of surface Blow off Cocks to each Boiler *one surface & one blow cock to Each Boiler*

Can each Boiler be used separately *yes*  
 What clear space between top of Boiler and woodwork *3' 2"*  
 What clear space between Funnel and woodwork *2' 6"*  
 Are Engine and Boiler Keelsons well connected fore and aft *yes*

SCREW SHAFT length *94" 11 3/4"* diameter *11 1/4" to 10 3/4"* Tunnel thickness of plating *3/16"* height *5' 7"*  
 width *4' 6"* if water-tight door on Engine Bulkhead. *yes*

Port *Amuland* 19 day of *Jan* 1875

I hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Sumida* belonging to *Tokei* whereof *Ramsey* is Master, *896* Tons Register, and *200* H.P. have been carefully inspected and examined by me at *Amuland* and *✓* found the same, at this date, in good order and safe working condition.

*J. Penblair*  
*J. Penblair*  
 Marine Engineers.