

Report No 3008 S.S. "Richmond"

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, Direct Acting, Inverted Cylinders & Surface Condensing Engines, No. of Cylinders Two.

ENGINES, maker of *Thos. Richardson & Sons*
 „ ~~age of~~
 „ ~~last time taken out~~
 „ present condition *new*
 Diameter of Cylinders *28" & 53" inches*
 Length of stroke *33 inches*
 No. per minute of Engines *65*
 „ of Screw *65*
 Estimated power *150*
 Effective power *500*
 Diameter of Screw (~~or Paddle Wheels~~) *12" 6*
 Pitch of Screw
 No. of Blades (~~or Floater~~) *4*
 Description of Screw (~~or Floater~~) *Ordinary*
 Holding down Bolts, size *1 1/4" diam.*
 „ present condition *new*

Bilge Pumps, No. (*Two*) and size *6" diam. & 6" stroke*
 Feed „ No. („) and size *3 1/4" & 1" 11 1/2"*

Spare gear, if usual quantity on board Vessel *Yes*

Fuel, where stowed *Side Bunkers*

„ space between Coal Bunkers and Boilers *1' 6" & 2' 3"*

„ for what quantity is space provided *at 150 Tons*

Donkey Engine and Boiler *yes*

„ if fitted in Engine Room or on Deck *In the Engine room*

„ can pump be worked by hand *No. A Separate Hand Pump*

Two „ size of pump (*7 1/2"*) and stroke *9" & Double Acting*

„ is hose of sufficient length to reach every part of the Vessel *Yes*

No. (*one*) and continuation of hand pumps, if fitted in Engine Room *Fitted in Engine room 14" diam. 9" stroke*

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.

Cylindrical Boiler, Tubular, Four Furnaces, No Superheater, & Fired Fore & Aft.

BOILER, maker of *Thos. Richardson & Sons*

„ ~~age of~~

„ ~~when last taken out~~

„ present condition *new*

„ working pressure *65 lbs p. sq. inch*

No. of surface Blow off Cocks to each Boiler *one Surface & one bottom*

Can each Boiler be used separately *Single Boiler*

What clear space between top of Boiler and woodwork *2' 0"*

What clear space between Funnel and woodwork *2' 3"*

Are Engine and Boiler Keelsons well connected fore and aft *Yes*

Screw SHAFT length *7 1/4" 11"* diameter *8 1/4" & 8 3/4"* Tunnel, thickness of plating *1/4" & 5/16"* height *5' 0"*
 width *3' 9"* if water-tight door on Engine Bulkhead. *Yes*

Port *Middlesbrough* 1st day of *November* 18 *71*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~) Steam Vessel *Richmond* belonging to *London* whereof *John Gilbert Edwards* is Master, *646* Tons Register, and *150* H.P. have been carefully inspected and examined by *Us* at *Middlesbrough* and *We* found the same, at this date, in good order and safe working condition.

J. Richardson & Sons
for Chas. Smith
 Marine Engineers.

IRON 504-0236