

11874 90W LOYD'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.

Inverted Direct Acting Compound - 2 Cylinders

ENGINES, maker of *Newdumfoulbours*
 „ age of *New*
 „ last time taken out *New*
 „ present condition *New*
 Diameter of Cylinder *One 54" & One 102"*
 Length of stroke *4 ft 6"*
 No. per minute of Engines *50*
 „ of Screw *50*
 Estimated power *530*
 Effective power *3000*
 Diameter of Screw (or Paddle Wheels) *18 ft*
 Pitch of Screw *30*
 No. of Blades (or Floats) *4 Blades*
 Description of Screw (or Floats) *Hutch's Patent*
 Holding down Bolts, size *1 1/2" & 2"*
 „ present condition

Bilge Pumps, No. (*2*) and size *7 1/2"*
 Feed „ No. (*2*) and size *7 1/2"*
 Spare gear, if usual quantity on board Vessel *Yes*
 Fuel, where stowed *Bunkers*
 „ space between Coal Bunkers and Boilers *2 feet*
 „ for what quantity is space provided *1000 tons*
 Donkey Engine and Boiler *Yes*
 „ if fitted in Engine Room or on Deck *Engine Room*
 „ can pump be worked by hand *Yes*
 2 „ size of pump (*4 1/2"*) and stroke *9"*
 „ is hose of sufficient length to reach every part of the Vessel *Yes*
 No. (*1*) and continuation of hand pumps, if fitted in Engine Room *One*

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.

Six Round Return Tubular Boilers. Three Furnaces in each, fired Athwartships, and fitted with Superheaters.

BOILER, maker of *A C O L*
 „ age of
 „ when last taken out
 „ present condition
 „ working pressure *65 lb*
 No. of surface Blow off Cocks to each Boiler *One*

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

SCREW SHAFT length *110 ft* diameter *15"* Tunnel, thickness of plating *3/8* height *6 feet*
 width *2 ft 6"* if water-tight door on Engine Bulkhead. *Yes*

Port *Renfrew* *4th* day of *September* 18 *93*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Vasco de Gama* belonging to *London* whereof *Rice* is Master, *2912* Tons Register, and *530* H.P. have been carefully inspected and examined by *us* at *1480 Renfrew* and *we* found the same, at this date, in good order and safe working condition.

Newdumfoulbours

Marine Engineers.

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