

10084

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.

The Engines are inverted directacting compound, with surface condenser and two Cylinders.

ENGINES, maker of *Palmer's Shipbuilding & Iron Co. Ltd*  
 „ age of *new*  
 „ last time taken out *—*  
 „ present condition *—*  
 Diameter of Cylinder *30" & 55"*  
 Length of stroke *33"*  
 No. per minute of Engines *70 revolutions*  
 „ of Screw *70*  
 Estimated power *190 H.P. nominal*  
 Effective power *675 indicated*  
 Diameter of Screw (~~Paddle Wheels~~) *13.6*  
 Pitch of Screw *15.0 increasing to 17.0*  
 No. of Blades (~~Blades~~) *4*  
 Description of Screw (~~Blades~~) *movable blades*  
 Holding down Bolts, size *2 1/2" diam*  
 „ present condition *—*

Bilge Pumps, No. ( *2* ) and size *6" diam 7 1/2" stroke*  
 Feed „ No. ( *2* ) and size *5" 10"*  
 Spare gear, if usual quantity on board Vessel } *yes*  
 Fuel, where stowed *In Side bunkers*  
 „ space between Coal Bunkers and Boilers } *14"*  
 „ for what quantity is space provided *129 tons*  
 Donkey Engine and Boiler *are provided*  
 „ if fitted in Engine Room or on Deck } *Donkey in Engine room*  
 „ can pump be worked by hand } *yes Boiler on Deck*  
 „ size of pump ( *4"* ) and stroke } *8" a Ballast donkey*  
 „ is hose of sufficient length to reach every part of the Vessel } *yes is also provided*  
 No. ( ) and continuation of hand pumps, if fitted in Engine Room } *none 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 cylindrical tubular Boilers with four circular Furnaces, dry uptake and an annular vertical Superheater at base of Funnel. The Boilers are fired from their forward ends.

BOILER, maker of *Palmer's Shipbuilding & Iron Co. Ltd*  
 „ age of *new*  
 „ when last taken out *—*  
 „ present condition *—*  
 „ working pressure *75 lbs*  
 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 } *10.0*  
 What clear space between Funnel and woodwork } *1.9*  
 Are Engine and Boiler Keelsons well connected fore and aft } *yes*

SCREW SHAFT length *33.7* diameter *9 x 9 1/2*. Tunnel, thickness of plating *—* height *—*  
 width *—* if water-tight door on Engine Bulkhead. *No Tunnel; the space in which the shafting works, forms part of Engine room as far aft as Stern tube bulkhead.*

Port *Newcastle on Tyne* 27<sup>th</sup> day of *March* 1872.

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~) Steam Vessel "*Vanessa*" belonging to *London* whereof *G. J. Martin* is Master, *266.58* Tons Register, and *190* H.P. have been carefully inspected and examined by *us* at *Larrow on Tyne* and we found the same, at this date, in good order and safe working condition.

*Palmer's Shipbuilding & Iron Co. Ltd*  
*Wm. L. Smith*  
 Marine Engineers.