

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 *15.5 increasing to 17.5*
 No. of Blades (~~Blades~~) *4*
 Description of Screw (~~Blades~~) *moveable 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 also provided*
 „ is hose of sufficient length to reach every part of the Vessel *yes and placed*
 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 27th 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. Meish
 Marine Engineers.