

1367 8th *Em*

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, one high & one low pressure cylinder.

ENGINES, maker of *Palmers Shipbuilding & Iron Co. Ltd.*
,, age of *new*
,, last time taken out *—*
,, present condition *new*
Diameter of Cylinder *30 1/2 x 61.*
Length of stroke *36*
No. per minute of Engines *66*
,, of Screw *66*
Estimated power *150 HP nom*
Effective power *700 - indicates*
Diameter of Screw (or *Paddle* Wheels) *15.0*
Pitch of Screw *14.6" increasing to 17.0"*
No. of Blades (*Plants*) *4*
Description of Screw (*Plants*) *movable steel blades*
Holding down Bolts, size *1 1/2 x 2 1/2*
,, present condition *new*

Bilge Pumps, No. (*2*) and size *4 1/2" diam, 18" stroke*
Feed ,, No. (*2*) and size *4 1/2" , 18" stroke*
Spare gear, if usual quantity on } *yes*
board Vessel }
Fuel, where stowed *In side & cross bunkers*
,, space between Coal Bunkers } *17"*
and Boilers }
,, for what quantity is space provided *196 tons*
Donkey Engine and Boiler *yes*
,, if fitted in Engine Room or } *Donkey in Engine room*
on Deck } *Boiler in Store room*
,, can pump be worked by hand *yes* *also a ballast*
,, size of pump (*4*) and stroke *8"* *donkey in engine*
,, is hose of sufficient length to } *yes* *room. -*
reach every part of the Vessel }
No. () and continuation of hand } *none*
pumps, if fitted 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.

There are 2 cylindrical tubular single end boilers with
6 furnaces (circular), dry uptake with a vertical annular
superheater on top. The boilers are fired from forward

BOILER, maker of *Palmers Shipbuilding & Iron Co. Ltd.*
,, age of *new*
,, when last taken out *—*
,, present condition *new*
,, working pressure *75 lbs per square inch*
No. of surface Blow off Cocks to } *on*
each Boiler }

Can each Boiler be used separately *yes*
What clear space between top of } *8.9"*
Boiler and woodwork }
What clear space between Funnel } *2.1 1/2*
and woodwork }
Are Engine and Boiler Keelsons } *yes.*
well connected fore and aft }

SCREW SHAFT length *111.8"* diameter *10" x 10 1/2"* Tunnel thickness of plating *5 1/16 & 3 1/8* height *4.1" to 5.6"*
width *3.9"* if water-tight door on Engine Bulkhead. *no, the tunnel is water tight*

Port *Newcastle on Tyne* 24th day of *November* 1874

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood)
Screw (or Paddle) Steam Vessel *"Trident"* belonging to *London*
whereof *Reid* is Master, *1600* Tons Register, and *150* H.P. have been
carefully inspected and examined by *us* at *Farrar on Tyne* and we found the
same, at this date, in good order and safe working condition.

FOR *Palmers Shipbuilding & Iron*
Company Limited

Mr. L. Neish
Marine Engineers. *Mr. B.*



Lloyd's Register
Foundation

IRON 459-0356