

Hamock 6788 14697 Iron

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, Inverted, Direct acting.

ENGINES, maker of *Cassat Co*
 „ age of *new*
 „ last time taken out *—*
 „ present condition *new*
 Diameter of Cylinder *32" + 54"*
 Length of stroke *36*
 No. per minute of Engines *70*
 „ of Screw *70*
 Estimated power *(130) 130 H.P.*
 Effective power *100 H.P.*
 Diameter of Screw (or Paddle Wheels) *13 feet*
 Pitch of Screw *17 feet*
 No. of Blades (or Floats) *four*
 Description of Screw (or Floats) *Ordinary*
 Holding down Bolts, size *1"*
 „ present condition *new*

Bilge Pumps, No. (*2*) and size *4 1/2"*
 Feed „ No. (*2*) and size *4 1/2"*
 Spare gear, if usual quantity on } *yes*
 board Vessel }
 Fuel, where stowed *forward of Boilers*
 „ space between Coal Bunkers } *8 feet*
 and Boilers }
 „ for what quantity is space provided *23 1/2 tons*
 Donkey Engine and Boiler *yes*
 „ if fitted in Engine Room or } *on deck*
 on Deck }
 „ can pump be worked by hand *yes*
 „ size of pump (*4 1/2*) and stroke *10 ins.*
 „ is hose of sufficient length to } *yes*
 reach every part of the Vessel }
 No. (*3*) and continuation of hand } *yes*
 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.

Flat sided multitubular, 2 furnaces with furnaces in each fitted with one superheater and fired from forward end.

BOILER, maker of *Cassat Co*
 „ age of *new*
 „ when last taken out *—*
 „ present condition *new*
 „ working pressure *60 lbs*
 No. of surface Blow off Cocks to } *two*
 each Boiler }

Can each Boiler be used separately *yes*
 What clear space between top of } *15 ins*
 Boiler and woodwork }
 What clear space between Funnel } *8 feet*
 and woodwork }
 Are Engine and Boiler Keelsons } *yes*
 well connected fore and aft }

SCREW SHAFT length *19' 9 1/2"* diameter *10"* Tunnel thickness of plating *1/4"* height *4' 8"*
 width *4'* *2'* if water-tight door on Engine Bulkhead *yes*

Port *Greaves 11* day of *June* 1875

My hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *"Umballa"* belonging to *The British India S.N. Co.* whereof *Morris* is Master, *340 1/2* Tons Register, and *130* H.P. have been carefully inspected and examined by *us* at *Greaves* and *was* found the same, at this date, in good order and safe working condition.

Caird & Co.