

10626 2m

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.

Direct acting, inverted, compound, surface condensing.
two cylinders

ENGINES, maker of *Thos Wingate & Co*
 „ age of *new*
 „ last time taken out *do*
 „ present condition *do*
 Diameter of Cylinder *35 and 70"*
 Length of stroke *39"*
 No. per minute of Engines *50*
 „ of Screw *50*
 Estimated power *220*
 Effective power *1,000*
 Diameter of Screw (or Riddle Wheels) *16 ft*
 Pitch of Screw *24 ft*
 No. of Blades (or Flutes) *4*
 Description of Screw (or Flutes) *Common*
 Holding down Bolts, size *1 1/8"*
 „ present condition *new*

Bilge Pumps, No. (*2*) and size *5 inches*
 Feed „ No. (*2*) and size *5 ins*
 Spare gear, if usual quantity on board Vessel *Yes*
 Fuel, where stowed *cross bunker & wings of boiler space*
 „ space between Coal Bunkers and Boilers *2 feet*
 „ for what quantity is space provided *300 tons*
 Donkey Engine and Boiler *Yes*
 „ if fitted in Engine Room or on Deck *Engine room*
 „ can pump be worked by hand *Yes*
 „ size of pump (*5"*) and stroke *10 ins*
 „ 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 *Bilge & sea*

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.

Three Boilers 10 feet diam—12'-6" long, tubular, 9 furnaces (3 in each)
 no superheating apparatus, fired from fore end

BOILER, maker of *Thos Wingate & Co*
 „ age of *new*
 „ when last taken out *do*
 „ present condition *do*
 „ working pressure *70 lbs*
 No. of surface Blow off Cocks to each Boiler *One, with main scacock*

Can each Boiler be used separately *Yes*
 What clear space between top of Boiler and woodwork *14 feet*
 What clear space between Funnel and woodwork *2 feet*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *130'* diameter *12 1/2* Tunnel, thickness of plating *1/2"* height *5 ft*
 width *3 ft* if water-tight door on Engine Bulkhead. *yes*

Port

Glasgow, *26* day of *August* 18*72*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel "*Louisiana*" belonging to *L. J. Mearrow & Others* whereof *Stewart* is Master, *220* Tons Register, and *220* H.P. have been carefully inspected and examined by us at *Glasgow* and we found the same, at this date, in good order and safe working condition.

Thomas Wingate & Co
Whiteinch Glasgow
 Marine Engineers.