

12416 Ln

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.

Inverted Compound Engines, Direct Acting, One High Pressure and one Low Pressure Cylinder

ENGINES, maker of *Maudslay Sons & Field*

„ age of *Quite new*

„ last time taken out *_____*

„ present condition *_____*

Diameter of Cylinders *High Pressure 36 inches*
Low Pressure 60 inches

Length of stroke *3 Feet 9 inches*

No. per minute of Engines *about 60*

„ of Screw *about 60*

Estimated power *200 Horses*

Effective power *1000 Horses*

Diameter of Screw (or Paddle Wheels) *16 Feet*

Pitch of Screw *19 Feet*

No. of Blades (or Floats) *Four*

Description of Screw (or Floats) *Cast Iron with moveable blades*

Holding down Bolts, size *1 1/2 Inch*

„ present condition *Quite new*

Bilge Pumps, No. (*Two*) and size *6 1/2 Inches diam*

Feed „ No. (*Two*) and size *5 Inches diam*

Spare gear, if usual quantity on board Vessel *Yes*

Fuel, where stowed *Engine Room and Foreward Bunkers*

„ space between Coal Bunkers and Boilers *9 inches least space*

„ for what quantity is space provided *400 Tons*

Donkey Engine and Boiler *_____*

„ if fitted in Engine Room or on Deck *Donkey Eng in Engine Room*

„ can pump be worked by hand *Yes*

„ size of pump *4 1/2 inch* and stroke *9 inches*

„ is hose of sufficient length to reach every part of the Vessel *Yes*

No. () and continuation of hand pumps, if fitted in Engine Room *One*

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 Furnaces at each end, tubes returning over Furnaces, Iron Boilers with iron Tubes. Four Furnaces in each Boiler. No Superheating apparatus fitted. Boilers fired at forward and after ends.

BOILER, maker of *Maudslay Sons and Field*

„ age of *Quite new*

„ when last taken out *_____*

„ present condition *_____*

„ working pressure *75 lbs per sq in*

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 *5 Feet 6 inches*

What clear space between Funnel and woodwork *3 Feet 6 inches*

Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *119 Feet* diameter *10 1/2 inch* Tunnel, thickness of plating *3/8* height *6 Feet*
width *4 Feet 9 inch* if water-tight door on Engine Bulkhead. *Yes*

Port *Newcastle on Tyne* 3rd day of *March* 1874

WE hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Arratoon Apear* belonging to *Loucan* whereof *Mr. Tonik* is Master, *1392.00* Tons Register, and *200* H.P. have been carefully inspected and examined by *us* at above port and *we* found the same, at this date, in good order and safe working condition.

Maudslay Sons & Field
London
Marine Engineers.

IRON 456-0328