

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.

Diagonal Oscillating Engines with four Cylinders - being one pair to each Crank pin - and dis-connecting

ENGINES, maker of *John & James Thomson*
 „ age of *New*
 „ last time taken out *—*
 „ present condition *—*
 Diameter of Cylinder *34 ins*
 Length of stroke *4 ft*
 No. per minute of Engines *—*
 „ of Screw *—*
 Estimated power *165*
 Effective power *—*
 Diameter of Screw (or Paddle Wheels) *18 ft 6*
 Pitch of Screw *—*
 No. of Blades (or Floats) *16 each wheel*
 Description of Screw (or Floats) *Radial*
 Holding down Bolts, size *1"*
 „ present condition *new*

Bilge Pumps, No. (*2*) and size *6 1/4" dia: x 15" Stroke*
 Feed „ No. (*2*) and size *6 1/4" dia: x 15" "*
 Spare gear, if usual quantity on board Vessel *—*
 Fuel, where stowed *Alongside Engines & Boilers*
 „ space between Coal Bunkers and Boilers *6"*
 „ for what quantity is space provided *85 Tons*
 Donkey Engine and Boiler *—*
 „ if fitted in Engine Room or on Deck *Engine Room*
 „ can pump be worked by hand *Yes*
 „ size of pump () and stroke *4" dia x 8" Stroke*
 „ is hose of sufficient length to reach every part of the Vessel *Yes*
 No. () and continuation of hand 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.

*2 Tubular Boilers fired fore & aft.
 3 furnaces in each*

BOILER, maker of *John & James Thomson*
 „ age of *New*
 „ when last taken out *—*
 „ present condition *—*
 „ working pressure *30 (loaded to 40)*
 No. of surface Blow off Cocks to each Boiler *one surface one at bottom*

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

SCREW SHAFT length diameter Tunnel, thickness of plating height
 width if water-tight door on Engine Bulkhead.

Port *Glasgow* *Fifth* day of *May* 18*71*

hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) *Steam* Vessel *Lady Carmichael* belonging to *Submarine Telegraph Co* whereof *Capt. Angus* is Master, *368* Tons Register, and *165* 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.

John & James Thomson
Glasgow

Marine Engineers.

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