

14440 *John*

## LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S CERTIFICATE.

## ENGINES.

Description *Inverted Cyl. & Surface Condensing* ✓  
 Made by *R. & W. Hawthorn.* *Surface Condenser by Oswald* ✓  
 In the year *1863* *1875* ✓  
 Present condition *good* ✓  
 Diameter of cylinders *38 inches* ✓  
 Length of stroke *30* " ✓  
 No. of revolutions per minute *about 60* ✓  
 Point of cut off *2 stroke* ✓  
 Paddle, or Screw *screw* ✓  
 Nominal Horse Power *90* ✓  
 Diameter of screw, or of paddle wheel \_\_\_\_\_  
 Pitch of screw \_\_\_\_\_  
 No. of blades, *4* total surface \_\_\_\_\_ ✓  
 No. of bilge pumps *2* and size *3 3/4 x 15 stroke* ✓  
 Do they pump from each compartment *each end of Engine room* ✓  
 Is there provision made for pumping } *no* ✓  
 from the wings of the stoke hole }

Are all the bilge suction pipes fitted with roses *yes* ✓  
 What vacuum and steam gauges are } *2 pressure gauges on boiler ✓*  
 there attached to the engines } *1 on each end & 1 vacuum gauge ✓*  
 and boilers ..... } *on Condenser ✓*  
 No. of feed pumps *2* and sizes *3 3/4 dia. x 15 stroke* ✓  
 Description and size of } *Common Inverted Cyl. 8 dia. x 7 1/2 stroke ✓*  
 Donkey Engine... } *Pump single acting 4 " x 7 1/2 " ✓*  
 Will it feed the boilers, pump } *yes. and from Hotwell ✓*  
 from the bilges, and pump }  
 on deck ..... }  
 Can it be driven by steam } *no. (no donkey boiler) ✓*  
 from a separate boiler }  
 No. of bilge injections *1* and sizes *3 " ✓*  
 Are they fitted with non return valves *yes* ✓  
 Is there a hand pump in the engine room *Donkey can be used as such ✓*  
 Can it be worked by the main engines *no* ✓  
 Is there a deck hose of sufficient length } *yes* ✓  
 to reach to any part of the vessel }

## CONNECTIONS ON HULL.

Are all connections with the sea } *no (see sketch on separate sheet) ✓*  
 direct on the skin of the ship }  
 Are they Kingston valves or common cocks *Common valves & Cocks* ✓  
 Are they fixed sufficiently high on } *below engine room flooring ✓*  
 the ship's side to be seen }  
 without lifting the stokehole }  
 plates ..... }  
 Are the discharge pipes above or } *above* ✓  
 below the deep water line }  
 Are they each fitted with a discharge } *yes* ✓  
 valve on the plating of the vessel }

Are any pipes carried through the bunkers *yes. discharge from Donkey ✓*  
 If so state how protected *with Iron Casing ✓*  
 When was the stern tube, } *April 1875 ✓*  
 propeller, screw shaft, }  
 and all connections }  
 examined in dry dock }  
 How are the pipes, cocks, and valves } *(see sketch on separate sheet) ✓*  
 arranged so as to prevent } *Water can be run into the ship ✓*  
 an unintentional connection } *by opening the sea cock for ✓*  
 between the sea and the bilge } *Donkey, whilst the Cock & valve is ✓*  
 Have the bilge suctions non- } *open to Bilge suction of Ballast Donkey ✓*  
 return valves fitted or not } *not fitted ✓*

## BOILERS.

Number *one* ✓  
 Description *Cylindrical* ✓  
 Made by *Dunlop & Meredith* *Hartlepool* ✓  
 In the year *1875* ✓  
 Present condition *new* ✓  
 When last extensively repaired *new* ✓  
 Working pressure *40 lbs per sq. inch* ✓  
 When tested by Hydraulic pressure *April 1875* ✓  
 To what pressure tested *80 lbs per sq. inch* ✓  
 Any super-heating apparatus *none* ✓  
 Describe it \_\_\_\_\_  
 Can each boiler be worked separately *only one* ✓  
 Is each boiler fitted with a separate steam gauge *2 on one* ✓

Can the super-heater be shut off and }  
 the boilers worked separately }  
 No. of safety valves on each boiler *2* ✓  
 Description and area of each safety valve *low & high area 15.9 sq. in. ✓*  
 No. of square feet of fire-grate } *6.8 sq. ft. ✓*  
 surface in each boiler }  
 Is there a separate blow off and } *yes* ✓  
 brine cock on each boiler, }  
 independent of those }  
 on the vessel's skin }  
 Is the screw shaft tunnel water } *no tunnel. watertight Bulkhead, ✓*  
 tight and fitted with a } *Engines are well aft in ship ✓*  
 sluice door on bulkhead }  
 Are all pipes, cocks, and roses in con- } *yes* ✓  
 nection with these boilers acces- }  
 sible to the engineer at all times }

Manufacturer.

I hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle)  
 Steam Vessel *"John Liddell."* owned by *G. S. Berwick & Co. Sunderland*  
 of the Port of *Sunderland* of *562* Tons Register, and *90* Nominal Horse Power,  
 have been carefully inspected and examined by *me* at *Sunderland* and found to be  
 at this date, viz., *May 5<sup>th</sup>* 1875 in good order and safe working condition.

*William Allison* © 2019  
 Engineer Surveyor to Lloyd's Register of Shipping.