

14440 Jon

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 *1/2 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 cocks for ✓*
 between the sea and the bilge } *Donkey, whilst the Cocks & valve is ✓*
 Have the bilge suction 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 weight area 15.9 sq. ✓*
 No. of square feet of fire-grate } *68 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 5th 1875* in good order and safe working condition.

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

