

14579 Iron.

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S CERTIFICATE.

ENGINES.

Description *Inverted Compound*
 Made by *R Napier & Co.*
 In the year *1870*
 Present condition *good-*
 Diameter of cylinder *39 1/2" and 68"*
 Length of stroke *42"*
 No. of revolutions per minute *60*
 Point of cut off *5/8 of stroke*
 Paddle, or Screw *Screw*
 Nominal Horse Power *240*
 Diameter of screw, or of paddle wheel *17 ft*
 Pitch of screw *18 ft 6 inches*
 No. of blades, *4* total surface *75 square feet*
 No. of bilge pumps *2* and size *3 3/4 dia 14" stroke*
 Do they pump from each compartment *Yes*
 Is there provision made for pumping }
 from the wings of the stoke hole } *Yes*

Are all the bilge suction pipes fitted with roses *Yes*
 What vacuum and steam gauges are }
 there attached to the engines } *one on Engines & one on each Boiler*
 and boilers..... }
 No. of feed pumps *2* and sizes *3 3/4" dia 14" stroke*
 Description and size of } *Double acting*
 Donkey Engine... }
 Will it feed the boilers, pump }
 from the bilges, and pump } *Yes*
 on deck }
 Can it be driven by steam }
 from a separate boiler } *Yes*
 No. of bilge injections *2* and sizes *33 square inches area*
 Are they fitted with non return valves *Yes*
 Is there a hand pump in the engine room *Yes*
 Can it be worked by the main engines *no*
 Is there a deck hose of sufficient length }
 to reach to any part of the vessel } *Yes*

CONNECTIONS ON HULL.

Are all connections with the sea }
 direct on the skin of the ship } *no on stand pipes*
 Are they Kingston valves or common cocks *Common cocks*
 Are they fixed sufficiently high on }
 the ship's side to be seen } *no*
 without lifting the stokehole }
 plates }
 Are the discharge pipes above or }
 below the deep water line } *below*
 Are they each fitted with a discharge }
 valve on the plating of the vessel } *Yes*

Are any pipes carried through the bunkers *no*
 If so state how protected *—*
 When was the stern tube, }
 propellor, screw shaft, } *March 1875*
 and all connections }
 examined in dry dock }
 How are the pipes, cocks, and valves }
 arranged so as to prevent } *by means of three way cocks*
 an unintentional connection }
 between the sea and the bilge }
 Have the bilge suction non- }
 return valves fitted or not } *no*

BOILERS.

Number *two*
 Description *Circular tubular*
 Made by *R. Napier*
 In the year *1870*
 Present condition *good-*
 When last extensively repaired *March 1875*
 Working pressure *58 lbs.*
 When tested by Hydraulic pressure *March 1875*
 To what pressure tested *80 lbs.*
 Any super-heating apparatus *Yes-*
 Describe it *annular*
 Can each boiler be worked separately *Yes-*
 Is each boiler fitted with a separate steam gauge *Yes.*

Can the super-heater be shut off and }
 the boilers worked separately } *no*
 No. of safety valves on each boiler *2*
 Description and area of each safety valve *Spring*
 No. of square feet of fire-grate }
 surface in each boiler } *143 square feet*
 Is there a separate blow off and }
 brine cock on each boiler, } *Yes*
 independent of those }
 on the vessel's skin }
 Is the screw shaft tunnel water }
 tight and fitted with a } *Yes*
 sluice door on bulkhead }
 Are all pipes, cocks, and roses in con- }
 nection with these boilers acces- } *Yes*
 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 *Lord of the Isles* owned by *Shaw Mason & Co.*
 of the Port of *London* of *1846* Tons Register, and *240* Nominal Horse Power,
 have been carefully inspected and examined by *me* at *London* and found to be
 at this date, viz., *April 1875* in good order and safe working condition.

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

