

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S CERTIFICATE, & REPORT.

ENGINES.

Rev 6/9/75

Description *Compound Oscillating*
 Made by *Messrs John Elder & Coy Glasgow*
 In the year *1875*
 Present condition *New*
 Diameter of cylinder *41" & 42"*
 Length of stroke *60"*
 No. of revolutions per minute *35*
 Point of cut off *Not ascertained*
 Paddle, or Screw *Paddle*
 Nominal Horse Power *220*
 Diameter of screw, or of paddle wheel *19" & 4" over floats*
 Pitch of screw
 No. of blades, ——— total surface
 No. of bilge pumps *2* and size *6 1/2" dia x 14 1/2" Stroke*
 Do they pump from each compartment } *Yes and*
 Is there provision made for pumping } *pump from both of*
 from the wings of the stoke hole } *Boilers*

Are all the bilge suction pipes fitted with roses *Yes*
 What vacuum and steam gauges are there attached to the engines and boilers... } *One Vacuum, one Steam, and one Compound Gauge in Engine Room, and one Steam Gauge in each stoke hole*
 No. of feed pumps *2* and sizes *6 1/2" dia x 20 1/2" Stroke*
 Description and size of Donkey Engine... } *Inverted Double acting 3" x 6" Stroke*
 Will it feed the boilers, pump from the bilges, and pump on deck } *Yes*
 Can it be driven by steam from a separate boiler } *Yes*
 No. of bilge injections *One* and sizes *5" Connected to Circulating Pump*
 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 engine } *No. Worked from Deck*
 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 } *Yes*
 Are they Kingston valves or common cocks } *Screw down Valves & Cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehole plates } *Blow off Cocks under stokehole plates*
 Are the discharge pipes above or below the deep water line } *Above*
 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, propeller, screw shaft, and all connections examined in dry dock
 How are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge } *Non return valve, & Intermediate Sea & Bilge suction cock has single ported plug, which cannot be turned to sea & bilge at the same time*
 Have the bilge suctions non-return valves fitted or not } *No*

BOILERS.

Number *Two*
 Description *Two Round Horizontal with Furnaces, one fixed from forward, the other from aft*
 Made by *Messrs John Elder & Coy Glasgow*
 In the year *1875*
 Present condition *New*
 When last extensively repaired
 Working pressure *60 lbs*
 When tested by Hydraulic pressure *about 15th June 1875*
 To what pressure tested *120 lbs*
 Any super-heating apparatus *No*
 Describe it
 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. of safety valves on each boiler *Two*
 Description and area of each safety valve *Direct Spring loaded 18.66" area*
 No. of square feet of fire-grate surface in each boiler } *72.56 sq. ft. in each boiler*
 Is there a separate blow off and brine cock on each boiler, independent of those on the vessel's skin } *Yes*
 Is the screw shaft tunnel water tight and fitted with a sluice door on bulkhead } *No Tunnel*
 Are all pipes, cocks, and roses in connection with these boilers accessible to the engineer at all times } *Yes*

Manufacturer.

I hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle)

Steam Vessel *Paris* owned by *London, Brighton, South Coast Railway Coy.*
 of the Port of *Newhaven* of *282.68* Tons Register, and *220* Nominal Horse Power,
 have been carefully inspected and examined by *me* at *Glasgow* and found to be
 at this date, viz., *Aug 24th* 18*75* in good order and safe working condition.

James Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.

