

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S CERTIFICATE & REPORT.

### ENGINES.

Description *Inverted Direct Acting. Surface Condenser* Are all the bilge suction pipes fitted with roses *Yes*  
 Made by *Blackwood & Gordon* What vacuum and steam gauges are there attached to the engines and boilers... *3 Steam & 1 Vacuum*  
 In the year *1868* No. of feed pumps *2* and sizes *3 1/2" dia 26" Stroke. Single Acting*  
 Present condition *Good* Description and size of Donkey Engine... *Pump 3 1/2" dia 7" Stroke. Double Acting*  
 Diameter of cylinder *36"* Will it feed the boilers, pump from the bilges, and pump on deck... *Yes*  
 Length of stroke *42"* Can it be driven by steam from a separate boiler... *Yes*  
 No. of revolutions per minute *About 55* No. of bilge injections *1* and sizes *2 1/2" dia*  
 Point of cut off *9/16" of Stroke* Are they fitted with non return valves... *No*  
 Paddle, or Screw *Screw* Is there a hand pump in the engine room *Yes. Gear not fitted*  
 Nominal Horse Power *1* Can it be worked by the main engines... *No*  
 Diameter of screw, or of paddle wheel *14 ft.* Is there a deck hose of sufficient length to reach to any part of the vessel... *Yes*  
 Pitch of screw *21 ft.*

### CONNECTIONS ON HULL.


Are all connections with the sea direct on the skin of the ship... *All except cock for ballast tank* Are any pipes carried through the bunkers... *No*  
 Are they Kingston valves or common cocks... *Common Cocks* If so state how protected... *No*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates... *No* When was the stern tube, propeller, screw shaft, and all connections examined in dry dock... *September - 18/68*  
 Are the discharge pipes above or below the deep water line... *Above* How are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge... *Efficient Arrangement*  
 Are they each fitted with a discharge valve on the plating of the vessel... *Yes* Have the bilge suction non-return valves fitted or not... *No*

### BOILERS.

Number *Two* Can the super-heater be shut off and the boilers worked separately... *No*  
 Description *Round. Multitubular. Flame acts on outside* No. of safety valves on each boiler *2*  
 Made by *Harer, Brothers. Bow. of tubes* Description and area of each safety valve *Adams Spring: 9.621 Area*  
 In the year *1845* No. of square feet of fire-grate surface in each boiler *35 sq ft.*  
 Present condition *New* Is there a separate blow off and brine cock on each boiler, independent of those on the vessel's skin... *Yes*  
 When last extensively repaired... *No* Is the screw shaft tunnel water tight and fitted with a sluice door on bulkhead... *Tunnel water tight. No door*  
 Working pressure *40 lbs* Are all pipes, cocks, and roses in connection with these boilers accessible to the engineer at all times... *Yes*  
 When tested by hydraulic pressure *Dec. 1845*  
 To what pressure tested *80 lbs*  
 Any super-heating apparatus... *No*  
 Describe it... *No*  
 Can each boiler be worked separately... *Yes*  
 Is each boiler fitted with a separate steam gauge... *Yes*

Manufacturer.

I hereby certify that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~)  
 Steam Vessel *Spartan* owned by *M. Spaulali*  
 of the Port of *London* of *1200* Tons Register, and *150* Nominal Horse Power,  
 have been carefully inspected and examined by me at *Victoria Dock. London* and found to be  
 at this date, viz., *28th December 1845* in good order and safe working condition.

  
 Engineer Surveyor to Lloyd's Register of Shipping.