

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 8/12/77

Description *Comp. 4 In. 1 1/2 A. S. Condor*
 Made by *J. Taylor & Co*
 When *1865* At *Recd. 1st Birkenhead*
 Diameter of cylinder *2 of 19 1/2* Length of stroke *33"*
 No. of revolutions per minute *about 60*
 Point of cut off *---* *21"*
 Diameter of screw shaft *8 1/2"*
 Diameter of crank shaft journals *8 1/2"*
 Diameter of screw, ~~or of paddle wheel~~ *12 ft*
 Pitch of screw *17 1/2 6"*
 No. of blades, *4* Total surface *about 45 ft*
 No. of bilge pumps *2* and sizes *3 1/2*
 Do they pump from each compartment *No. (sluice fitted)*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *2* and sizes *3 1/2"*
 What gauges are there attached to the engines and boilers ... *1 To each Boiler in stokehold 1 Pres. 1 Vacuum 1 1/2 Pres. in E.R.*
 Description and size of Donkey Pumps ... *1 of 4" J. Acting*
 Where do they pump from ... *Sea, bilges, W.B. Tanks to D's Boilers and overboard*
 No. of bilge injections *1* and sizes *4 1/2"*
 Are they connected to air, or circulating pumps *Air pump*
 Is there a hand pump in the engine room *No*
 Can it be worked by the main engines *Yes*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS. *New*

Number *Two* Description *Cyl. R. tubular*
 Made by *J. Jones & Son*
 When *1877* At *Liverpool*
 Working pressure *75 lbs*
 Tested by hydraulic pressure to *150 lbs (stated)* Date
 Description of super-heating apparatus *Not any*
 Can each boiler be worked separately *Yes*

Can the ~~super-heater~~ *Steam chest* be shut off and the boilers worked separately *No*
 Description and area of safety valves on each boiler ... *2 of Spring load = 5.93 area each*
 No. of square feet of fire-grate surface in each boiler *39 ft*
 Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*
 Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *Yes*

DONKEY BOILER. *New*

Description *Vertical, Cyl.*
 Where fixed *In iron casing on W.B. D's*
 Working pressure *50 lbs*

Tested by hydraulic pressure to *---*, Date *---*
 Description and area of safety valves *Lever load = 9.62*
 No. of square feet of fire grate *19.6 area*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes*
 Are they Kingston valves or common cocks *Common cocks & chests*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates *Not all level*
 Are the discharge pipes above or below the deep water line *level*
 Are they each fitted with a discharge valve on the plating of the vessel *Yes with the exception of hot well discharge which has valve on hot well Manufacturer.*

What pipes are carried through the bunkers *Donkey exhaust*
 How are they protected *Wood casing*
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *at this time*
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Yes*

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~) Steam Vessel *Sydney Queen* owned by *Messrs Givvin & Slater* of the Port of *Liverpool* of *626* Tons Register, and *140* Registered Horse Power, and that they have been carefully inspected and examined by me at *Liverpool* and found to be at this date, viz., *28th June* *1877* in good order and safe working condition.

Amount of Fee for Survey ... £2 : 2 : ..

(Travelling Expenses, if any, £)

(1000/31/7/76.)

Engineer Surveyor to Lloyd's Register of Shipping.

IRON 475-0093