

1762 3 2nd

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 17/1/99

Description *Comp^d Inot^d, J.A. S. Conroy*
 Made by *Messrs Laird Brothers*
 When *1876-7* At *Birkenhead*
 Diameter of cylinder *14 3/8"* Length of stroke *12"*
 No. of revolutions per minute *about 60*
 Point of cut off *3/4 stroke*
 Diameter of screw shaft *12 1/2"*
 Diameter of crank shaft journals *11 1/2"*
 Diameter of screw, or of paddle wheel *15" 3*
 Pitch of screw *18" 6"*
 No. of blades, *Four* Total surface *66 ft²*
 No. of bilge pumps *One* and sizes *4 3/8" diam 22" stroke*
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *One* and sizes *4 3/8" diam 22" stroke*
 What gauges are there attached to the engines and boilers ... *1 Pressure gauge on each boiler 1 Press. 1 Back press 1 Vacuum*
 Description and size of Donkey Pumps ... *5" plunger, double acting*
 Where do they pump from ... *Sea bilge & hot well to Boilers Deck, Condenser & overboard*
 No. of bilge injections *One* and sizes *6" with non return valve*
 Are they connected to air, or circulating pumps *Circulating pump*
 Is there a hand pump in the engine room *Yes*
 Can it be worked by the main engines *Yes but not from deck*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Two* Description *Cylindrical, single ended*
 Made by *Messrs Laird Brothers*
 When *1876-7* At *Birkenhead*
 Working pressure *65 lbs*
 Tested by hydraulic pressure to *130 lb*, Date *16th Nov 1876*
 Description of super-heating apparatus *Not any*
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *No*
 Description and area of safety valves on each boiler ... *(Patent) Spring loaded 2 on each boiler = 15.90 area each*
 No. of square feet of fire-grate surface in each boiler *63.3*
 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.

Description *Circular return tubular*
 Where fixed *In recess of bunker in stokehold*
 Working pressure *45 lbs*

Tested by hydraulic pressure to *130 lbs*, Date *16th Nov 1876*
 Description and area of safety valves *Direct loaded = 11.04 area*
 No. of square feet of fire grate *18 ft²*

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*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *Not all, donkey action chest and bottom blow off cocks under, but easy of access above*
 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*
Laird Bros Manufacturer

What pipes are carried through the bunkers *Not any*
 How are they protected *---*
 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 *"Sicity"* owned by *David MacIver Esq M.P.* of the Port of *Liverpool* of *1083.79* Tons Register, and *200* Registered Horse Power, and that they have been carefully inspected and examined by me at *Birkenhead* and found to be at this date, viz., *4th January* 18 *77* in good order and safe working condition.

J. G. Kinghorn
 Engineer, Surveyor to Lloyd's Register of Shipping.

Fee £10 - " - " see Rep^r No 2534
J. F. L.

No. Report (if any) on Hull of Vessel.