

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Description *Four cyl. Compound Inverted*Made by *J. Forrester & Son*When *May* 18*72* At *Liverpool*Diameter of cylinder *21" x 41"* Length of stroke *39"*No. of revolutions per minute *58*Point of cut off *5/8 stroke*Diameter of screw shaft *12"*Diameter of crank shaft journals *11 1/2"*Diameter of screw, or of paddle wheel *17' 6"*Pitch of screw *14' 0"*No. of blades, *4* Total surface *57' 6"*No. of bilge pumps *2* and sizes *4 1/2" dia 19 1/2" stroke*Do they pump from each compartment *Yes!*Are all the bilge suction pipes fitted with roses *Yes!*No. of feed pumps *2* and sizes *4 1/2" dia 19 1/2" stroke*What gauges are there attached to the engines and boilers ... *4 steam to Boilers (2 on each) 1 to Engine Room 1 Vacuum fitted*Description and size of Donkey Pump ... *Vertical double acting 4" dia, 10" stroke*Where do they pump from ... *all compartments sea and scowell.*No. of bilge injections *1* and sizes *4 1/2" dia*Are they connected to air, or circulating pumps *circulating*Is there a hand pump in the engine room *Yes!*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.

Number *2* Description *Cylindrical*Made by *Yes. Forrester & Son*When *May* 18*72* At *Liverpool*Working pressure *70 lbs*Tested by hydraulic pressure to *107 lbs*, Date *Aug 2-1876*Description of super-heating apparatus *2. Cylindrical*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 *2 on 11 1/2" dia 30 sq inches*No. of square feet of fire-grate surface in each boiler *60 sq feet*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. *all except Bilge suction roses in holds*

DONKEY BOILER.

Description *Cylindrical & Vertical*Where fixed *Main deck*Working pressure *42 lbs per sq inch*Tested by hydraulic pressure to *+ 90 lbs per sq inch*, Date *May 72*Description and area of safety valves *2 Relief - valves = 5.48 area one vertical weight, one horizontal*No. of square feet of fire grate *15.9 sq feet*

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 ... *one Stop Valve, rest are Common Cocks*Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *all except Ash cocks*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!*What pipes are carried through the bunkers *None*How are they protected *None*When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *Stem tube & shaft 24 March 1875 Scruy & connections on ships bottom same 1876*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!*

Manufacturer.

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 *"Dahli"* owned by *Kayrover Ferguson & Jackson* of the Port of *London* of *1304* Tons Register, and *200* Registered Horse Power, and that they have been carefully inspected and examined by me at *London* and found to be at this date, viz., *August 2nd* 18*76* in good order and safe working condition.

Engineer Surveyor to Lloyd's Register of Shipping.