

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Description *Inverted Surface Condensing* Are all the bilge suction pipes fitted with roses *yes*
 Made by *J. Hoskins* No. of feed pumps *2* and sizes *4" x 4"*
 When *1874* At *London* What gauges are there attached to the engines and boilers ... *1 Steam to Boiler 15 & 1 Vac to Engines*
 Diameter of cylinder *29* Length of stroke *24* Description and size of Donkey Pumps ... *Two Double Act 4" dia 6" stroke*
 No. of revolutions per minute *70* Where do they pump from ... *Feed Boiler & pumps on Deck*
 Point of cut off *17 inches* No. of bilge injections *One* and sizes *3/2*
 Diameter of screw shaft *6 3/4 inches* Are they connected to air, or circulating pumps *Circulating*
 Diameter of crank shaft journals *6 3/4 inches* Is there a hand pump in the engine room *No*
 Diameter of screw, or of paddle wheel *not ascertained* Can it be worked by the main engines *Yes*
 Pitch of screw *not ascertained* Is there a deck hose of sufficient length to reach to any part of the vessel *yes*
 No. of blades, *3* Total surface *not ascertained*
 No. of bilge pumps *1* and sizes *4 x 4*
 Do they pump from each compartment *Eng Room only*

MAIN BOILERS.

Number *One* Description *Cylindrical* Can the super-heater be shut off and the boilers worked separately *None fitted*
 Made by *W. J. Kenley* Description and area of safety valves on each boiler ... *2 SW 4 1/2" dia*
 When *1874* At *Woolwich* No. of square feet of fire-grate surface in each boiler *35 sq feet*
 Working pressure *40 lb* Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *yes*
 Tested by hydraulic pressure to , Date *yes*
 Description of super-heating apparatus *None* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times *yes*
 Can each boiler be worked separately *only one boiler*

DONKEY BOILER.

Description *Vertical* Tested by hydraulic pressure to *15 lb, stated* Date *1877*
 Where fixed *On Deck* Description and area of safety valves *1 SW 4 1/2" area*
 Working pressure *5 lb* No. of square feet of fire grate *9.6 sq feet*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *yes* What pipes are carried through the bunkers *Manifold suction*
 Are they Kingston valves or common cocks ... *One Cocks and ordinary valve* How are they protected *Wood Casings*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *not* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *At this date*
 Are the discharge pipes above or below the deep water line *Above* Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *yes*
 Are they each fitted with a discharge valve on the plating of the vessel *yes* Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *No tunnel*

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 *Caroline* owned by *W. J. Kenley*
 of the Port of *London* of *1403* Tons Register, and *70* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *London*
 and found to be at this date, viz., *July 9th* 18 *77* in good order and safe working condition.

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