

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Ru 14/7/76

Description *Compound, Inverted, Direct Acting*
 Made by *Robert & McEwen Glasgow 1869*
Compounded by Rankin, Blackmore & Co
 When *18 7/23* At *Greenock*
 Diameter of cylinder *5 1/4 x 45* Length of stroke *45*
 No. of revolutions per minute
 Point of cut off
 Diameter of screw shaft *1 1/4*
 Diameter of crank shaft journals *1 1/2*
 Diameter of screw, *or of paddle wheel* *17 1/2*
 Pitch of screw *25 ft*
 No. of blades, *Four* Total surface *about 90 ft*
 No. of bilge pumps *Two* and sizes *5" x 45" stroke*
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *Two* and sizes *5" x 45" stroke*
 What gauges are there attached to the engines and boilers ... *One Steam, One Vacuum & One Compound*
 Description and size of Donkey Pumps ... *Double acting 6" dia x 40" stroke*
 Where do they pump from ... *From the Sea & Bilge*
 No. of bilge injections *One* and sizes *4 1/4*
 Are they connected to air, or circulating pumps *to Circulating*
 Is there a hand pump in the engine room *Yes*
 Can it be worked by the main engines *No*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Two* Description *Round Horizontal Double ended*
 Made by *Rankin, Blackmore & Co*
 When *18 7/2* At *Greenock*
 Working pressure *60 lbs*
 Tested by hydraulic pressure to *not ascertained* Date
 Description of super-heating apparatus *Round Annular (Vertical)*
 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 *Two Direct loaded, each 28.27" area. & one direct loaded on Superheater*
 No. of square feet of fire-grate surface in each boiler *109 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.

Description *Round Vertical*
 Where fixed *On Main Deck*
 Working pressure *30 lbs*

Tested by hydraulic pressure to _____, Date
 Description and area of safety valves *Direct loaded*
 No. of square feet of fire grate *14 ft*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *No. They are fitted on Standards*
 Are they Kingston valves or common cocks ... *Sluice Valves, Screw down Valves & Cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *At the Blow off Cocks are under the stokehold plates*
 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 *Bilge pipes to Locks*
 How are they protected *By strong wood casing*
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *June 9th 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 *"Pemesis"* owned by *P. Denny* of the Port of *London* of *220 1/2* Tons Register, and *550* Registered Horse Power, and that they have been carefully inspected and examined by me at *Greenock* and found to be at this date, viz., *July 7th 1876* in good order and safe working condition.

Leo paid 5-5

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