

16800 Iron  
Rec'd 24.7.76

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Description *Inverted cyl, surface condensing*  
 Made by *Palmer*  
 When *1864* At *Sarrows*  
 Diameter of cylinder *38"* Length of stroke *30"*  
 No. of revolutions per minute *68*  
 Point of cut off \_\_\_\_\_  
 Diameter of screw shaft *8"*  
 Diameter of crank shaft journals *4 1/4"*  
 Diameter of screw, or of paddle wheel *11 ft.*  
 Pitch of screw *15 ft*  
 No. of blades, *4* Total surface \_\_\_\_\_  
 No. of bilge pumps *2* and sizes *4 1/2" dia 15" stroke*  
 Do they pump from each compartment *Engine Room only*

Are all the bilge suction pipes fitted with roses *Yes!*  
 No. of feed pumps *2* and sizes *4 1/2" dia 15" stroke*  
 What gauges are there attached to the engines and boilers ...  
*1 Steam on Boiler*  
*1 on engines*  
*1 Vacuum ditto*  
 Description and size of Donkey Pumps ...  
*Boiler donkey 5" dia, 6" stroke,*  
*Tank donkey 8" dia 10" stroke*  
*Boiler donkey from Bilge & Sea*  
 Where do they pump from ...  
*Tank donkey from Bilge & Tanks*  
 No. of bilge injections *1* and sizes *3 1/2"*  
 Are they connected to air, or circulating pumps *circulating*  
 Is there a hand pump in the engine room *No - "donkey used"*  
 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 *1* Description *Dry Bottom*  
 Made by *Palmer*  
 When *1871* At *Sarrows*  
 Working pressure *35 lbs per sq. inch,*  
 Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description of super-heating apparatus *Annular & Vertical*  
 Can each boiler be worked separately *No!*

Can the super-heater be shut off and the boilers worked separately *No!*  
 Description and area of safety valves on each boiler ...  
*No dead weight*  
*39.2 sq. inches,*  
 No. of square feet of fire-grate surface in each boiler *55 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 Tank discharge valve, ship's side & Tank filling cocks,*

### *No* DONKEY BOILER.

Description \_\_\_\_\_  
 Where fixed \_\_\_\_\_  
 Working pressure \_\_\_\_\_

Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description and area of safety valves \_\_\_\_\_  
 No. of square feet of fire grate \_\_\_\_\_

### PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *All except Tank filling pipes*  
 Are they Kingston valves or common cocks ... *1 Stop valve rest common - cocks,*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *All except Boiler Blow-off and ash cock*  
 Are the discharge pipes above or below the deep water line *All except Tank discharge*  
 Are they each fitted with a discharge valve on the plating of the vessel *Yes!*

What pipes are carried through the bunkers *Tank discharge*  
 How are they protected *Iron casing,*  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *Stern tube Aug - 75*  
*Log and connections July 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 *No - Ironed*

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 *"Fairfield"* owned by *J. Ince & Son* of the Port of *London* of *587* Tons Register, and *41* 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 17th* 1876 in good order and safe working condition.

*G. W. Mammell*  
 Engineer Surveyor to Lloyd's Register of Shipping.

