

17300 Iron

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Report (if any) on Hull of Vessel. Port Hartlepool No. 17300

Description Inverted Compound Surface Condensing  
 Made by Marshall, Osborne & Co  
 When 1874 At South Shields  
 Diameter of cylinders 22 & 44 Length of stroke 24  
 No. of revolutions per minute 70  
 Point of cut off about 1/2 stroke  
 Diameter of screw shaft 7" in the tunnel  
 Diameter of crank shaft journals 7"  
 Diameter of screw, or of paddle wheel \_\_\_\_\_  
 Pitch of screw \_\_\_\_\_  
 No. of blades, 4 Total surface \_\_\_\_\_  
 No. of bilge pumps 1 and sizes 4" dia x 15" stroke  
 Do they pump from each compartment after hold & Engine room

Rev 80/10/76

Are all the bilge suction pipes fitted with roses yes  
 No. of feed pumps 1 and sizes 4" dia x 15" stroke  
 What gauges are there attached to the engines and boilers ... } 1 steam on the boiler  
 } 1 vacuum on Condenser  
 Description and size of Donkey Pumps ... } 2 inverted double acting, large  
 } one 6" dia x 9" stroke, small 4" x 9"  
 } the large one from the tanks & bilge  
 } the small one from the sea, to well  
 } & bilges of engine room & aft well  
 Where do they pump from .....  
 No. of bilge injections one and sizes 3" dia  
 Are they connected to air, or circulating pumps to circulating pump  
 Is there a hand pump in the engine room No (the small donkey can be used as such)  
 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 one Description Cylindrical & Multi-tubular  
 Made by Marshall Osborne & Co  
 When 1876 At South Shields  
 Working pressure 65 lbs  
 Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description of super-heating apparatus } none  
 Can each boiler be worked separately only 1 boiler

Can the super-heater be shut off and the boilers worked separately } \_\_\_\_\_  
 Description and area of boiler } 2 loaded by lever and  
 } safety valves on each  
 } weight 3 1/2" dia = 19.2 sq in  
 No. of square feet of fire-grate surface in each boiler } 40  
 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 (except the bilge discharge of the small donkey)

### DONKEY BOILER.

Description Upright Cylindrical with 2 cross tubes  
 Where fixed in the stokehole  
 Working pressure 50 lbs per sq. inch

Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description and area of safety valves 1 lb weight 3" dia = 7 area  
 No. of square feet of fire grate 9 1/2

### 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 ... } stop valves & cocks  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ..... } no. the ash, donkey, & blow off cocks below  
 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 small donkey bilge discharge  
 How are they protected wood casing & run up to deck  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock } Sept 1876  
 } I was not present  
 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 } sluice door fitted  
 } tunnel not water tight

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 "Sandringham" owned by Kings Lynn S.S. Co of the Port of Lynn of 344 Tons Register, and 80 Registered Horse Power, and that they have been carefully inspected and examined by me at Hartlepool and found to be at this date, viz., Oct. 5<sup>th</sup> 1876 in good order and safe working condition.

Amount of Fee for Survey ... .. £ : :  
 (Travelling Expenses, if any, £.....)

William Allison  
 Engineer Surveyor to Lloyd's Register of Shipping